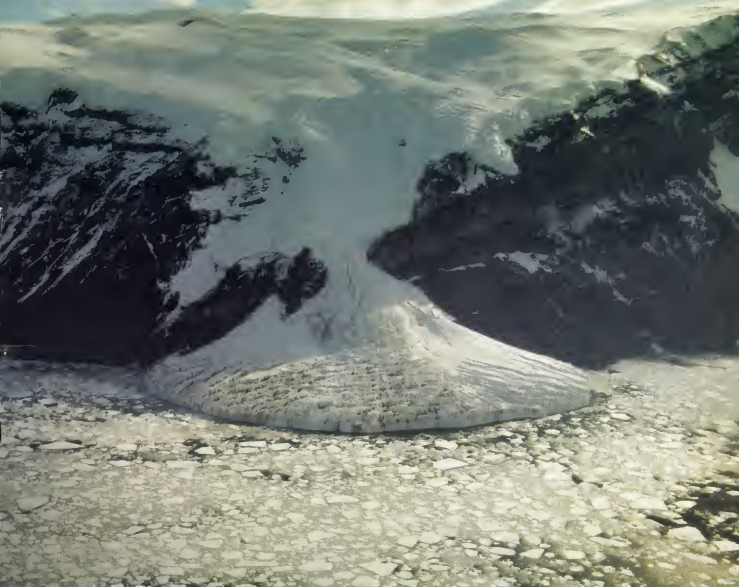


Jaycar

ELECTRONICS

\$1.00

ENGINEERING CATALOGUE '89



ELECTRONICS INTO THE NEXT DECADE

148
PAGES

N.S.W. STORES



SYDNEY: (Showrooms)
117 York Street
Phone: (02) 267 1614



GORE HILL: 188-192 Pacific Highway
(Cnr Bellevue Avenue)
Phone: (02) 439 4799



HURSTVILLE: 121 Forest Road
Phone: (02) 570 7000



CONCORD: 115-117 Parramatta Road
Phone: (02) 745 3077



New Parramatta store. Corner Victoria Road and Church Street. Ph: 683 3377.



Inside picture of Parramatta Store.

VIC. STORES



MELBOURNE: 45 A'Beckett Street, City
Phone: (03) 663 2030



Inside shot of our A'Beckett Street store.



Would you buy a used EPROM from one of these guys?



SPRINGVALE: 887-889 Springvale Road
Phone: (03) 547 1022



Inside shot of our Springvale store.

Jaycar
ELECTRONICS

HEAD OFFICE:

115-117 Parramatta Rd, Concord NSW
2137 □ P.O. Box 185 Concord NSW 2137
Phone: (02) 747 2022
Telex: 72293 □ Fax No: (02) 744 0767
Mail Order Hotline: (02) 747 1888
Order Line: 008 022 888

QLD STORE



BRISBANE: 144 Logan Road Buranda
Phone: (02) 393 0777



Another view of Logan Road store.

Front Cover:

Fan Glacier.

This magnificent photograph was taken by Jutta Malnic. The formation is found on the King George V Coast between Leningradskaya and Cape Denison.

Dear Fellow Electronics Enthusiast,

1988, wow! What a year.

We are all coming down from our great Bicentennary. Now it's back to work! Seriously though, our staff here all worked very hard to once again give you great service in 1988. We did not open any more stores in '88 - but reluctantly moved our first ever branch store at Carlingford in Sydney to busy Parramatta. The move was a pretty quick one and we apologise to any of our regular Carlingford customers who may have been inconvenienced. We certainly hope that you appreciate the larger store with its easier parking.

Cover Illustration

This superb illustration shows a fine example of a fan glacier. We decided to use Antarctica as our theme for the 1989 catalogue. By now most of us have heard that there appears to be mounting evidence of a growing 'hole' in the ozone layer over the Antarctic continent. Scientists strongly suspect that a range of industrial gases generically called chlorofluorocarbons (CFC's for short) are partially responsible for the destruction of this layer (which blocks some harmful UV light from the sun). Whilst the evidence is not complete it appears that no time should be wasted. Up until end of 1988 Jaycar carried service aid sprays that contained CFC-type propellants. In the interests of the environment we have discontinued this range and now only carry non-CFC propellant sprays. It's only a small step but a step in the right direction we think. Reflect on this as you study the beautiful photographs on the front and rear covers of our 1989 catalogue.

New Products

Jaycar staff were busy in 1988 searching the world (not just Asia) for new products for you, for example our low price rack cases, digital multimeters, plasma display lamp, speakers and speaker kits. Outstanding value for money. Not to forget new locally made products as well. As a result we have expanded our catalogue to 148 pages - more pages of product than any local hobby electronics supplier - ever!

Mail Orders

Whilst our busy and efficient mail order staff have processed thousands of mail and telephone orders this year we have noticed a new trend. People are sending mail orders by Fax! Another great way to order! So if you have access to a Fax machine we can really blast your order through on (02) 744 0767. Don't forget our toll free mail order line (006) 022 888 or inquiry hotline (02) 747 1888.

New Accounts

We are welcoming companies and institutions who are regular Jaycar customers to open accounts with us. We have responded in a positive way to many requests for this over many years. The guidelines are minimal. To see if you qualify check pages 142/143 for details.

Prices

I am pleased to say that many prices in this years catalogue have come down. Much of this, of course, is from the strengthening Australian dollar. (Let's hope it stays that way!) But inflation is now down to a dull roar and local prices have been steady as well. Our pledge is to pass on to you the best products at the lowest possible prices. Once again in closing I repeat that we will not knowingly be undersold on any item of the same quality. If you find a competitor selling the same product for less tell us and will match or better their price. (Not for inferior goods though!) Thankyou for your support in '88. We look forward to serving you again in Australia's 201st year.

Kind regards,

Gary Johnston

Managing Director - Jaycar Pty Ltd

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Studio 200 Hi Fi Preamp

Ref: Silicon Chip June, July 1988

A high quality, reasonably priced Hi Fi stereo preamp is presented here. Ideal for home or road work, it can be matched with any poweramp with a standard input sensitivity of 1V RMS. It is housed in a 44mm black rack case and requires 240 volts AC.

Main Features Include:

- Very low noise on phono and line level inputs - better than many CD players
- Very low harmonic and intermodulation distortion
- Up to seven stereo program sources can be connected
- Tape monitor loop
- Separate headphone amplifier giving very high quality
- Headphone socket disables output signal to power amp
- Stereo/mono switch
- Tone and balance controls with centre detent
- Tone defeat switch
- Easy-to-build construction using three separate PCB assemblies

Kit includes 4 PCB's, case with punched, silk screened front panel and Scotchclad rear panel, mains transformer and all specified components.

Specifications

Frequency Response Phono Inputs RIAA/IEC ± 0.3 dB from 20Hz to 20kHz High level inputs within ± 1 dB from 10Hz to 100kHz **Total Harmonic Distortion** Less than 0.005% 20Hz to 20kHz at rated output level for any input or output **Signal-to-Noise Ratio** Phono (moving magnet) 86dB unweighted (20Hz to 20kHz) with respect to 10mV input signal at 1kHz and rated output with 1k ohm resistive input termination; 90dB A-weighted with respect to 10mV input signal at 1kHz and rated output with 1k ohm resistive input terminal. High level inputs (CD, Tuner, etc.) 104dB unweighted (20Hz to 20kHz) or better, with respect to rated output (with volume at maximum) with tone defeat switch in or out; 107dB A-weighted, with respect to rated output (with volume at maximum) with tone defeat switch in or out. **Separation Between Channels** ≥ 20 dB at 10kHz; ≥ 10 dB at 1kHz and ≥ 30 dB at 100Hz with respect to rated output and with undriven channel input loaded with a 1k ohm resistor **Input Sensitivity** Phono inputs at 1kHz 4.3mV, High level inputs 240mV; **Input Impedance** (Phono) 50k ohm shunted by 100pF **Input Impedance** (CD, etc) 50k ohm; **Overload capacity** (Phono) 150mV at 1kHz **Output level** rated output 1.25V; maximum output 8.4V RMS; **output impedance** 470 ohms; **headphone output** 50mW into 8 ohm phones, 100mW into 32 ohm phones **Tone Controls** Bass ± 10 dB at 100Hz, treble ± 12 dB at 10kHz **Phase** With tone controls defeated, non-inverting (i.e. zero phase shift) from phono to main output; non-inverting from high level inputs to main outputs. Non-inverting from all inputs to Tape Out. With tone controls in circuit, inverting from phono and high level inputs to main outputs (i.e. 180° phase shift)

Cat. KC-5033

\$229



5000 Power Amp "Black Monolith" Re-born with Topology Modules

Ref: ETI Jan-March '81 and AEM April '87

Jaycar proudly re-introduce the fantastic 5000 series power amplifier with the new 'state of the art' Topology Power Modules.

What IS the difference?

Whilst we are sceptical, some people feel that Mosfet sound is 'harsh'. Good engineering back in 1979/80 produced a fine design in the 5000 series amps. This design is still valid but, in deference to the (many) people who were critical of Mosfet sound he reassessed the whole Mosfet amp design philosophy. He redesigned the amp, but a vast amount of engineering time was also spent producing the best possible subjective performance. The design uses the same Hitachi 2SK134/2SJ49 Mosfets with new features viz: a fully symmetric voltage amplifier stage driven by a cascade differential pair which employs both bipolar transistors and a dual J-FET. This overall circuit topology was selected only after a great deal of experimentation and was found to give the best subjective performance of the various topologies tried during the development.

"Black Monolith" is the special name that we apply to the special treatment that we give to the full 5000 Series Power Mosfet Amplifier. The performance of this amplifier is astonishing (see specs). In keeping with the "No Compromise" performance, Jaycar has set out to produce a kit which has no peer. The Jaycar "Black Monolith" is WITHOUT DOUBT the best 5000 amplifier kit on the market today AT ANY PRICE.

There have been limitations but none have the features of this kit.

Laboratory Measured Performance

Power Output Around 100W RMS into 8 ohms (both channels driven) **Frequency Response** 8Hz to 20kHz, ± 0.4 dB; 2.8Hz to 65kHz, ± 0.3 dB Note: these figures are determined solely by passive filters **Input Sensitivity** 1V RMS for 100W output Hum -100dB below full output (fret) Noise -116dB below full output (fret) **2nd Harmonic Distortion** $<0.001\%$ at 1kHz (0.0007% on prototypes) at 100W output using ± 58 V supply rated at 4A continuous $<0.003\%$ at 10kHz and 100W **3rd Harmonic Distortion** $<0.0003\%$ for all frequencies less than 10kHz and all powers below clipping **Total Harmonic Distortion** Determined by 2nd harmonic distortion (see above) **Intermodulator Distortion** $<0.0003\%$ at 100W (50Hz and 7kHz mixed 4:1) **Stability** unconditional

Cat. KE-4200

\$499

GET THE UPGRADED MODULE PERFORMANCE FOR THE SAME PRICE AS THE OLD 5000 AMP!

ALREADY HAVE A 5000 AMP?

UPGRADE IT with the AEM 6005 100 watt 'Ultra Fidelity' topology Mosfet Amp Modules

Ref: Australian Electronics Monthly April 1987.

David Tillbrook, the original designer of the 5000 amp (Jaycar "Black Monolith" 5000 amp kit sales 3000+) has designed a retrofit module which enables you to upgrade your old 5000 amp to the latest design philosophy 'Ultra Fidelity'

The Jaycar kit includes the new PCB all board parts, including fresh heatsink grease, new jig-drilled heatsink, etc. Note that the Hitachi Mosfets 2SK134/2SJ49 (2 of each) are not supplied as you will have these when you dismantle the old 5000 (477) boards. These devices are available separately as new parts 2SK134 Cat. ZT-2454 \$9.95 and 2SJ49 Cat. ZT-2449 \$9.95. THE DIFFERENCE IN PERFORMANCE WILL STAGGER YOU! Cat. KM-3056 (Supplied without Mosfets)

\$79.50 per channel

BETTER PERFORMANCE THAN EVER





Playmaster/Jaycar 60/60 Blueprint Amplifier

IT LOOKS SO GOOD YOUR FRIENDS WON'T BELIEVE YOU BUILT IT!

Ref: EA Magazine May, June, July 1986

We now have a "Blueprinted" version of the Playmaster 60/60. We believe the "Blueprint" represents a significant improvement in the development of this project. Dual diagonally wound C-Core power transformer. Endorsed in writing (with each kit) by EA. Slightly higher power rating than toroid power transformer (which is in the standard kit). For lower noise, metal film 1% 50ppm resistors are now supplied where 5% carbon types were originally specified. Power supply filter capacitors - doubled! That's right, the Blueprint has 4 x 4700µF/63V capacitors instead of the 4 x 2200µF types in the standard version. This significantly improves power supply performance. Special extruded heatsink. The heatsink section is machined from a heavy section extruded aluminium section. It is then black anodised. The standard heatsink is folded sheetmetal not anodised. Special high quality pre-treated PCB * Special front panel treatment - graphics emphasise Blueprint treatment.

150 WATTS PLUS MUSIC POWER!

* For short term power capability (Music Power), as measured by the Institute of High Fidelity specification IHF-A-207 the amplifier can deliver 105 watts into an 8 ohm load for a single channel, and no less than 155 watts into a 4 ohm load under the same conditions.

FEATURES OF THE 60/60

- * 60 watts per channel with both channels driven into 8 ohm loads
- * Very low noise on phono and line level inputs - better than CD performance
- * Very low harmonic and intermodulation distortion
- * Excellent headroom
- * Tape monitor loop
- * Tone controls with centre detent and defeat switch
- * Mono/stereo switch
- * Easy-to-build construction
- * Very little wiring

PERFECT CD PLAYER COMPANION

Hum and noise levels for line level input is actually better than any currently available CD player at 103dB plus. You can't hear a thing with your ear right on the speaker cone and the volume up full! The volume control is calibrated "CD Clip" at a level corresponding to 2V signal level or full amp output power with CD player input.

BEGINNER CONSTRUCTORS CAN BUILD THIS AMP

If you can use simple hand tools and a soldering iron you can build this project. The designers at EA believe (as we do) that many 1,000's of audio enthusiasts, with little or no electronic constructor experience would want to build this amp - so it's designed on one large printed circuit board. Virtually everything is board mounted i.e. even input sockets and switches! There is no shielded wire, in fact there is only a handful of soldered connections external to the PCB. So by simply following the step-by-step instructions and inserting components with the pre-drilled PCB and soldering, the amp is thus constructed.

YOU WILL BE PROUD OF THE RESULT AND IT WILL LAST A LIFETIME.

PERFORMANCE SPECIFICATION

Power Output (One channel) 4 ohms 80W, 8 ohms 74W Power Output (Both channels) 4 ohms 72W, 8 ohms 62W Harmonic Distortion Less than 0.01%

for all powers to 60W into 8 ohm loads; Less than 0.015% for all powers to 70W into 4 ohm loads; Intermodulation Distortion Less than 0.01% for all powers to 60W into 8 ohm loads; Less than 0.012% for all powers to 80W into 8 ohm loads Frequency Response Phono Inputs - RIAA/IEC equalisation within ± 0.5 dB from 20Hz to 20kHz - Line level Inputs -0.5dB at 20Hz and -1dB at 20kHz Input Sensitivity Phono Inputs at 1kHz - 4.3mV (overload capacity at 1kHz - 140mV - line level Inputs - 270mV Hum and Noise Phono (with respect to 10mV at 1kHz) -89dB unweighted; with typical moving magnet cartridge. High level inputs (with respect to 270mV) -103dB unweighted with 20Hz to 20kHz bandwidth Tone controls Bass ± 12 dB at 50Hz; treble ± 12 dB at 10kHz Damping factor At 1kHz and 30Hz - greater than 80

Stability Unconditional

"This new amplifier offers a standard of performance far ahead of anything we have previously published and ahead of most commercial integrated stereo amplifiers".

"It is half to one third the cost of an imported amplifier with equivalent power output and performance".

Says Leo Simpson former Managing Editor of Electronics Australia Magazine

BLUEPRINT

Cat. KA-1652

\$369.00

STANDARD VERSION

Cat. KA-1650

\$329.00

AM/FM Stereo Synthesised Tuner

Ref: EA December 1985 - February 1986

This tuner will outperform any commercially available tuner REGARDLESS OF PRICE. We could not say that unless it was true. As well as getting an FM stereo section which is at least as good as any synthesised tuner ever built, it is the only unit featuring a genuine wideband low distortion AM stereo (CQ/AM) tuner! Not only do you get that you get digital frequency readout, 12 station memory, automatic station seek and an optional infra red remote control.

JAPAN EAT YOUR HEART OUT!!

This design is one every Australian can be proud of. It has no peer anywhere else in the world - and you can have one. The metalwork is an exact replica of the prototype as are all of the very difficult-to-obtain components. We sincerely hope you will recognise the significance of an Australian "home grown" product which is a world beater.

SPECIFICATIONS

AM TUNER

Tuning Range
Freq. Response
Harmonic Distortion

522 to 1611kHz
-3dB @ 5.5kHz
Mono 0.4% @ 30% modulation
Stereo <1% @ 30% modulation
450mV RMS into 4.7k ohm load
@ 100% modulation
Typically 30dB

Audio Output

Stereo Separation
AGC Range
S/N Ratio

40dB for a 6dB change in audio output
70dB with respect to full output for signal levels of 9 and 10
on bar graph display, better than 60dB with respect to full output for signal levels greater than 8
Usable Sensitivity 350µV @ -6dB audio level

FM TUNER

Tuning Range
Freq. Response
Harmonic Distortion

87.9 to 107.9MHz
-1dB @ 20Hz, -0.5dB @ 15kHz
Mono 0.15% (100Hz) 0.15% (1kHz) 0.2% (8kHz)
Stereo 0.4% (100Hz) 0.4% (1kHz) 0.4% (8kHz)
450mV RMS into 4.7k ohm load @ 100% mod
34dB (50Hz) 34dB (1kHz) 36dB (10kHz)

Audio output

Stereo Separation
Subcarrier Product Rejection
15kHz Rejection

48dB
62dB

Cat. KA-1635

\$599

Remote Control

Ref: EA April 1986

For that final touch of luxury on your Playmaster stereo AM/FM tuner you need the infra red remote control. With this you can sit back and select any of the 12 programmed stations at will or tune to any FM or AM station with the up and down tuning buttons. Cat. KA-1636

\$99.50



1/3 Octave Graphic Equaliser

Ref: Silicon Chip March 1989

TOTALLY NEW DESIGN - STUNNING AUDIO PERFORMANCE
The 28 band Jaycar Graphic Equalisers have been unbelievably popular over the last 8 years. Jaycar, along with Silicon Chip have taken the best features of the 28 band graphics and incorporated them into this **TOTALLY NEW ELECTRONIC DESIGN** which features **VASTLY SUPERIOR** audio performance to our old graphics. Apart from the 4 extra bands (which now extend from 16Hz to 20kHz) the new 'Studio Series' graphic features radically new slide pots, especially made for the project. They have a much different resistance taper than the old linear pots of previous designs and are almost universally used in professional graphics than can cost over one thousand dollars!! In keeping with the professional nature of the product, they are mounted in a standard 19" 2 unit configuration, and power directly from mains. Naturally the Jaycar kit is supplied with all metalwork including the state-of-the-art LM833 low noise Op-amps, specially made slider controls, etc.

Cat. KC-5050 **\$239**



SPECIFICATIONS

Frequency Response	Flat
Equaliser Out	5Hz - 20kHz ± 1 dB & -3dB at 45kHz
Equaliser In	± 12 dB
Boost and Cut	
Signal Handling	Unity
Gain	10 volts RMS (all controls flat)
Max input & Output	<0.05% for frequency range 10Hz to 20kHz
Harmonic Distortion	95dB unweighted (20Hz - 20kHz)
Signal to Noise Ratio	97dB A-weighted
with respect to 1V RMS	33k Ohm
Input Impedance	1k Ohm
Output Impedance	

2010 MkIIA Stereo Equaliser (1 Octave)

THE FAMOUS JAYCAR 2010

If you can't afford to pay for 2 third 5000 octave equalisers then the 2010 might be for you. The 2010 is an octave (i.e. one control per octave) equaliser. (Octave centre frequencies, 31, 62, 125, 250, 500, 1k, 2k, 4k, 8k & 16kHz). This still gives you tremendous room equalisation. The 2010 also features separate level controls for right and left channels, and a multi-function pushbutton mode switch. You can, for example, equalise both recording and playback when dubbing from disc to tape or tape to tape as well as equalise bypass for A-B comparisons. Each control gives you a ± 12 dB of adjustment and otherwise has similar performance levels to the 5000 unit. Supplied in a prepunched 88mm (2 rack unit) cabinet which matches the 5000 system. Looks good on its own.

Cat. KJ-6535

\$169



"Ultra Fidelity" Preamplifier

Ref: AEM October - December 1985

The definitive Preamplifier by David Tilbrook

"The input noise figures subsequently obtained are significantly better than the best op-amp designs and exceed the specifications of the best commercial amplifiers." David Tilbrook, AEM October 1985

The AEM6010 design is on a purist philosophy being that the less you put in the signal path the less likely you are to distort it. The aim of the project was to design unit that would challenge the finest commercial designs. It has been designed with the accent on acoustic performance. Its dynamic range, noise, distortion and frequency response characteristics are extremely good. But just as important to the acoustic performance are such parameters as channel separation, power supply regulation, freedom from dynamic distortion mechanisms and maintenance of the integrity of the signal earth line. Inputs include MM or MC cartridge, CD, two tuners - AM and FM, auxiliary - (Hi Fi VCR, etc). The kit is housed in a deluxe metal cabinet featuring heavy gauge brush - finished front panel with matching knobs. Power supply requirements. Unit needs 30-35 volts i.e. +30V/0/-30V. If used with the 5000 power amp, the secondary power outputs in the 5000 are wired in series and will comfortably supply the preamp. If used on its own a toroidal transformer 30/0/30 is recommended.

KM-3030

\$359



Parametric Equaliser

Ref: ETI July 1986

This module can be used on its own or in ganged to equalise a whole system. Parametric equalisers are different to graphic equalisers.

"Parametrics" can be made to tune around a centre frequency whereas 'graphics' have a fixed centre frequency. This tuning effect generally means that the number of equalisers in a signal line can be reduced (reducing distortion) and they are more versatile.

The Jaycar kit is supplied with all board components including the potentiometers, knobs switch and TL071 IC.

BRIEF SPECIFICATIONS

Range of Centre Freq.	20Hz to 19kHz
Range of Q	1 to 10
Cut	-23dB
Boost	+18dB
Roll Off	15dB/octave

Cat. KE-4724

\$23.50



One Octave Equaliser Module

Ref: AEM December 1987

This kit is a ten band graphic equaliser that delivers top performance at an affordable price. Ideal for many of our amplifier modules as well as PA and sound reinforcement applications. The centre frequencies have been set to industry standards: 32Hz, 64, 125, 250, 500, 1kHz, 2, 4, 8 and 16kHz. Kit includes two PCB's, one for electronics and one for the sliders. Power requirements +15V, -15V. Short form kit, no box or hardware. 10 slider pots included.

SPECIFICATIONS

Boost & Cut	12dB
Frequency Response	10Hz to 100kHz ± 0.5 dB (Controls centre)
THD	0.008%, 20Hz-10kHz (with respect to 1V μ signal)
S/N Ratio	105dB A-weighted (with respect to 1V μ signal)
Voltage Gain	Approx 5, i.e. 14dB (Controls centre)

Cat. KM-3064

\$59.95

8 Channel Audio Mixer - Jaycar 8002

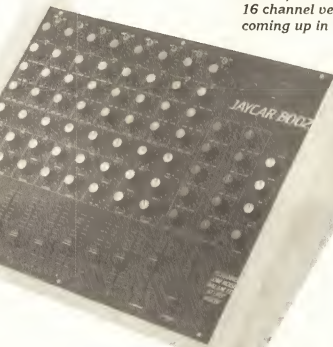
Ref: EA April/May 1983

The Jaycar 8002 mixer was originally conceived to be the successor to the very popular ETI 414 Master Mixer. The 414 was basically configured as a 'stage' mixer and suffered from a number of severe technical limitations - notably poor signal-to-noise figures. Enormous advances in audio IC's have occurred since the 414 was designed. Jaycar engineers have taken advantage of this. The incredibly low noise and distortion figures of the 8002 are a testimony to the sound basic design of the mixer coupled with the performance capabilities of these IC's. Whilst the 8002 is the ideal 8 channel compact stage mixer, other applications have been kept in mind. The 8002 front panel measures 19" wide x 14" high (8 rack units). This enables the 8002 to be mounted into PA equipment racks if necessary. Strictly speaking, the chassis is not needed in this configuration although the chassis is also rack mountable.

The 8002 can also console mount with attractive heavy timber end-pieces adding to the appearance of the unit. Powerful 'Sends' capability is built in to this mixer. Both special effects ('echo' for example) and foldback for the stage performers can be sent from any one or all of the 8 input channels. Fully variable calibrated sends attenuators are provided on each channel. Sends can be panned across the stereo image to create spectacular sonic effects. You could, for example, pan a pre-recorded tape of steam trains rushing from the right hand side of the stage - across - and exit stage left with this facility. Balancing sorts the real mixers out from the toys. With the 8002 you can take either a microphone level input or a line level input into any of the 8 channels. An input selector switch is provided at the top of the mixer panel. Another attenuator is provided at this point to prevent overload of the input circuitry should the incoming signal prove to be higher than normal microphone or line levels.

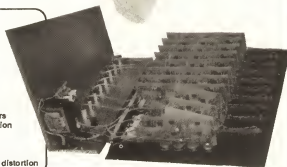
Each input channel has 3 band equalisation capability with a massive 12dB boost or cut. A pan control enables each input channel to be positioned left thru right across a stereo image. Inputs out of stereo position on a stage can be positioned in the mixer. Finally a quality 60mm slider fade control is provided. We felt that in keeping with the professional nature of the instrument that the extra resolution that the larger control offers is warranted. The left and right monitor channels have VU metering. Also provided is a 5 band graphic equaliser (± 9 dB), master foldback send is also provided.

Watch for new 12 & 16 channel versions coming up in '89!



MAIN FEATURES

- Balanced (600 ohm) mic Input/line Inputs
- Input attenuators
- Cannon connectors included in the price
- Bass, mid and treble equalisation on each input
- 'Effects' (i.e. echo, etc) capability
- Foldback on all 8 inputs
- Stereo pan on all 8 inputs
- 60mm slide faders used throughout
- 19" rack mount capability (or console mount)
- Professional black front panel with format borders
- Multicoloured knobs to assist function identification
- Designed for quick and easy service
- VU metering
- Only high quality components used
- 5534A OP amps used for low noise and very low distortion



RACK KIT

This is the basic mixer. This kit gives you virtually all the electronics. Provided - front panel, VU meters, 11 PCB's, all potentiometers (rotary and slide), knobs, components for PCB's, hook-up wire, etc. All Cannon AXR connectors are included as well. It is ideal for rack mount and all that is necessary is a ± 15 V 1A power supply. Cat. KJ-6504

\$595

DESK CONSOLE

This kit consists of console chassis, power supply including fuses, power lead, etc. and wooden end pieces. It enables you to mount the rack kit for conventional desk use. Cat. KJ-6505

\$119



Mixer Kit

Technical

- S/N microphone input -75dB with ref to +4dBm
- S/N line input -90dB with ref to +4dBm
- Line out level -4dBm (OVU)
- Distortion 0.005%
- Power requirement 240V AC 50Hz 25 watts

Input Module

This unit consists of all parts necessary to construct one input. (Eight of these are in the KJ-6504).

Supplied are all rotary pots and knobs, the 60mm slider and the 3 pole toggle switch as well as the PCB and PCB components. Cat. KJ-6503

\$55

Sum Amp, 5 Band Eq/Driver Module

Two of these are used in the standard 8002.

This unit has a sum amp which accepts (and adds) the levels from the input modules, provides 5 band equalisation as well as driving balanced and unbalanced lines. VU metering is also provided.

All controls, knobs, PCB and parts provided. Cat. KJ-6506

\$55

Foldback/ Effects Sends Module

One of these is used in the 8002, however, more can be easily used in a custom configuration. This unit enables you to take buffered foldback from the mixer and also allows you to mix the effects (such as a digital delay line, reverb, etc) back into the line. Once again all parts supplied. Cat. KJ-6507

\$37.50

8002 Power Supply Module

This provides a stable, regulated low noise ± 15 V @ 1A for the mixer. Will power up to 8 input modules. Cat. KJ-6509

\$39.50

100W Amp Module with Polyswitch Speaker Protection

Ref: Silcon Chip December 1987

This high power amplifier module give very low distortion and noise. It also features foolproof protection against short-circuits and loudspeaker damage. Silcon Chip have looked hard at past amplifier designs and have come up with the definitive solution for those who need rugged reliable sound without breaking the bank. A particular feature of this amp is its low distortion 0.1% for the entire frequency range 20Hz to 20kHz at all power levels up to maximum.

Hi tech speaker protection devices are used in this amp. Fuses and relays are not the answer. Its polyswitches. These are positive temperature coefficient thermistors with very low resistance. When the current through a polyswitch goes high it immediately switches to a high resistance state and stays until the fault condition is removed. Its like a fuse which can repair itself. As far as we know, this is the first time that PTC thermistors have been incorporated into an amplifier design to give comprehensive protection.

PERFORMANCE OF PROTOTYPE: Output Power: 100W into 4 ohms • Frequency Response (at 1W): 20Hz-50kHz \pm 1dB • Harmonic Distortion 0.1% • S/N Ratio 100dB • Protection 3A fuses plus RDE245A polyswitch • Damping Factor without polyswitch 100 and with polyswitch 100 • Stability unconditional. As polyswitches are optional we have not included them in the kit price. Kit includes PCB, all components (less polyswitches) and heatsink bracket.

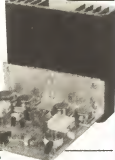
100 WATT

Cat. KC-5019

\$38.95

RDE245A
thermistors to suit
Cat. RN-3418
\$8.95 each

**\$99.80 for
stereo 100W
modules with
full speaker
protection**



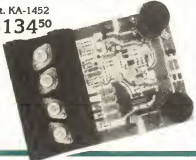
Subwoofer

Ref: EA July 1982

State-of-the-art MOSFET technology combined with a low pass filter. Around 1000 rms drive capability. Ideal for use with the Jaycar subwoofer speaker (Cat. CW-2119). Amp will take line level (1V) input or connect direct to the speakers. The Jaycar kit includes all PCB parts, heatsink, and power supply filter capacitors.

Cat. KA-1452

\$134.50



ETI 480 Series Amplifier Modules

Ref: ETI December 1976
& ETI's 30 Audio Projects
ETI 480/100

A complete audio amplifier on a single board. Just add a power supply and you have a 100 watt Hi Fi musical instrument or PA amplifier! Use it with the KE-4014 Mixer/Preamp for instrument or PA. Kit contains metal bracket, all PCB items and instructions. Legendary performance at a modest price.

Cat. KE-4052

\$34.50

ETI 480/50

Same circuit as the 480/100 except less output transistors, half the power and a little cheaper. Great if you don't need 100 watts. All parts supplied.

Cat. KE-4050

\$27.50

Suitable transformer 28-0-28V @ 2A

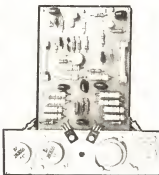
Cat. MF-1095

\$38.95

POWER SUPPLY

Cat. KE-4048

\$29.50



AEM6000 Series Power Amp Modules

Ref: AEM June - July 1986

The amplifier modules for the unbelievable 6000 power amplifier are now available separately. What more can we say than to list the specs. Supplied with PCB, all components including Mosfets and heatsink bracket.

SPECIFICATIONS:

• Supply Voltage: 50-0-50 to 75-0-75 volts • Power Consumption: <300mA at idle • Output Power 50-0-50 Supply: >100W into 8 ohms; >150W into 4 ohms • Output Power 75-0-75 Supply: >240W into 8 ohms; >360W into 4 ohms • Damping Factor: >300 (100Hz); >300 (1kHz); >100 (10kHz) all 8 ohm • Frequency Response: (determined by passive input filters only) • Optional Input Capacitor (Fitted): <0-0.1dB <20Hz; >25kHz; <0-0.5dB <10Hz; >18kHz; <0-3dB <4Hz; >130kHz (Not Fitted): <0-0.1dB dc to >25kHz; <0-0.5dB dc to >48kHz; <0-3dB dc to >130kHz • Total Harmonic Distortion 8 Ohm Load: 100Hz <0.005% @ 1W; <0.005% @ 10W; <0.005% @ 100W; <0.005% @ 200W for all frequencies from 100Hz through 10kHz • Signal to Noise Ratio re Full Power Output with a 200 ohm Source Impedance Connected: 400Hz - 20kHz noise bandwidth = >118dB A-weighted; 20Hz - 20kHz noise bandwidth = >105dB A-weighted • Total Equivalent Input Noise: 20Hz - 20kHz noise bandwidth = <3.5uV A-weighted i.e. <103dBm A-weighted • Slew Rate (input filter removed): >60V/usec.

Cat. KM-3044

\$119

Signal Powered Loudspeaker Protector ETI 494

Ref: ETI October 1982

This unit affords both DC and over-power protection of loudspeakers or systems rated at up to 1500 watts! The unit requires no power supply and has no discerning audible effect on sound quality making it suitable for both Hi Fi and sound reinforcement applications. Two required for stereo. Kit includes PCB and all components including relay.

Cat. KE-4023

\$22.50

300 Watt Playmaster Amplifier



Ref: EA June 1980

This rugged design produces 200 watts rms into 8 ohms and 300 watts rms into 4 ohms. All parts fit on a single PCB. It also features comprehensive protection circuitry, and will even withstand short circuits for short duration without adverse effect. Unlike other high powered amps it is unconditionally stable. It will not therefore break into supersonic oscillations, overheat and fail.

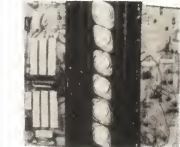
SPECIFICATIONS

• Power Output 4 ohm 300 watts rms 8 ohm 200 watts rms • Freq. Response 20Hz - 20kHz • 1dB • Harmonic Distortion 0.1% 4 ohm 150 watt 0.02% 8 ohm 100 watt • Input Sensitivity 1.5V @ 47k ohm • Hum & Noise 95dB with respect 100W • Damping Factor >100 1kHz & 30Hz • Slew Rate 70V/usec

Kit includes PCB, heatsink and all components.

Cat. KA-1115

\$119.95



300W Amp Power Supply Kit

This basically consists of a 300V/A power transformer (PF4363) rectifier and filter capacitors. It also has a 15V AC power supply for the speaker protectors.

Cat. KA-1116

\$105.00

Speaker Protector Kit For 300W Amp

Ref: EA July 1980

This device is designed to mate with the Jaycar KA-1115 Playmaster 300W amp module. It also provides the handy facility of switch on mute. This disconnects the speakers for the first few seconds when the amp is switched on, avoiding that horrifying thump in the speakers.

This speaker protector is cheap insurance. The Jaycar kit provides all PCB parts including the relay.

Cat. KA-1117

\$23.50

Versatile Guitar Preamplifier

Ref: ETI November 1987

Main features include: a top boost and normal input for guitars, two pre-eq line inputs, bass and treble controls, effects send and return, a sweep eq section, four post eq line inputs and a master level control. No level control is provided for the line inputs as typical inputs would be drum machines and synthesizers. Ideal where there are insufficient amp inputs for all instruments. Bass and treble will provide max cut and boost of frequencies at 100Hz and 8kHz to obtain a wide tonal range. To give a harder edge to sounds, a top boost input is available whereby frequencies above 1kHz are amplified; at around 10kHz there is a massive 20dB of boost! The normal input has a flat response and is excellent for those mellow rhythm chords. A bass cut is built into the input amplifiers. Kit is supplied with PCB and all components. Hardware items - 6.5 skts and transformer are not supplied. Power requirements 12 - 0 - 12V
Cat. KE-4729

\$45



120 Watt PA/Guitar Amp Module

Ref: Silicon Chip November 1988

This rugged 120W MOSFET amplifier module is designed specifically to drive a 100V line transformer for public address amplifiers. It can also be used as a stand alone module for guitar amplifiers and domestic stereo amplifiers. Short form kit, PCB, MOSFETs and all components supplied, but no heatsink or heatsink bracket.

SPECIFICATIONS

- Power Output RMS 125 watts into 4 ohms; 90 watts into 8 ohms; 120 watts into 100V AC line
- Frequency Response 20Hz to 50kHz (1-3dB) without line transformer; 20Hz to 23kHz (3-3dB) with line transformer
- Input Sensitivity 1.1V into 22k ohms input impedance
- Harmonic Distortion <0.1% from 20Hz to 20kHz
- Signal to Noise Ratio -111dB from unweighted 20Hz to 20kHz
- 115dB A-weighted
- Damping Factor >50 for 8 ohm loads
- Stability Unconditional
- Cat. KC-5043

\$72.50



ETI 467 Mixer/Preamp

Ref: ETI July 1980

Mixes up to 4 inputs (high and low level) with individual level controls. Includes high performance 3 band tone controls making it ideal for musical instrument use. Kit comes without a case so that you can build it with a power amplifier if you wish. Operates from 2 x 15V AC (usually available from power amp supply, otherwise use Cat. MM-2008 transformer).

SPECIFICATIONS

Hum & Noise

Frequency Responses

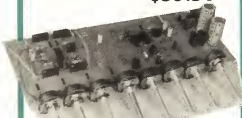
Tone Controls

Max Output before Clipping
Cat. KE-4014

78dB below 50mV input signal [20kHz bandwidth]
30Hz - 30kHz \pm 1dB
Bass \pm 17dB @ 50Hz
Presence \pm 22dB @ 1.5kHz
Treble \pm 22dB @ 10kHz

20V P to P

\$39.50



High Performance Microphone Preamp

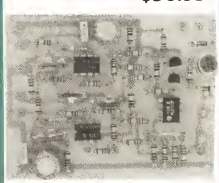
Ref: AEM August 1987

This preamp features DC coupling throughout and achieves a signal to noise ratio of 80dB, common-mode rejection ratio exceeding 8dB well beyond the audio band and provides for phantom powering up to 18 volts. In addition it can be employed in a variety of balanced and unbalanced configurations, balanced in to balanced out, balanced in to single ended out, single ended in to balanced out and single ended in to single ended out. Ideal replacement for balanced microphone transformers often used in professional applications. Short form kit - PCB and components only - no power supply and housing supplied.

SPECIFICATIONS TO PROTOTYPE

- Voltage Gain: 170 (approx 45dB) • Slew Rate: 18V/us
- Large Signal Bandwidth: >130kHz • Frequency Response: \pm 0.1dB/DC to 120kHz
- THD [20kHz bandwidth, balanced mode, FLAT measurement]
- Source Impedance 0 - 200V; 200R - 35kV; 800R - 441V
- S/N Ratio (ra 10mV input, 600 ohm source, flat)
- Common-Mode Rejection Ratio (CMRR): 100Hz - >110dB; 1kHz - >110dB; 10kHz - >110dB; 100kHz - >80dB
- Cat. KM-3061

\$36.95



Stroboscopic Tuner for Musicians

Ref: EA July 1988

Tune your musical instruments electronically. This simple kit provides crystal-locked accuracy for tuning virtually any musical instrument also doubles as a stable frequency reference if you prefer to tune up by ear. Kit includes PCB, box, front panel, speaker and all components. Requires 6 AA batteries or use with a 240V plugpack.

Cat. KA-1705

\$47.50



AEM 6505 "Workhorse" Amp Module

100 WATTS INTO 4 OHMS/50 WATTS INTO 8 OHMS! AND CHEAP!
Ref: AEM January 1987

A genuine low cost power amp 'slave' module. Similar in concept to the ever popular ETI480 series but with power supply filter caps on board. This simplifies power supply requirements and keeps costs down. All that is required to make the module operational is \pm 30 - 40V (DC unfiltered) a signal source and a load! Works well with PA line transformers too. All board parts are supplied including jig drilled heatsink bracket.

SPECIFICATIONS OF PROTOTYPE

- Output Power: 50W RMS into 8 ohms and 100W RMS into 4 ohms
- Frequency Response: 15Hz to 35kHz -0.5dB; 10Hz to 50kHz -1dB
- Total Equivalent Input Noise [20kHz noise bandwidth] <5.5uV • S/N Ratio >100dB • Total Harmonic Distortion (THD): <0.05% at 50W; <0.06% at 10W; <0.15% at 1W all at 8 ohms
- Protection: Electronic

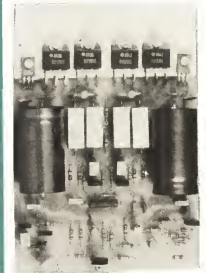
Cat. KM-3050

Suitable Heatsinks

Cat. HH-8572 \$6.95 or

Cat. HH-8541 \$8.95

\$35



1GHz Digital Frequency Meter

Ref: Silicon Chip November/December 1987

This superb 1GHz Digital Frequency Meter will outperform any other instrument in its price range. It uses the highest performance ICs, provides both frequency and period measurements, switchable gate times, an eight digit readout with switchable decimal points and overflow indication. Kit is complete with laser cut silk screen front panel, anodised punched rear panel and all parts.

SPECIFICATIONS

• **Operational Modes:** Period, frequency to 1GHz, 100MHz, 10MHz • **Frequency Range:** 10Hz-1GHz (1.7GHz typ.) in frequency mode; 10Hz-2.5MHz (5MHz typ.) in period mode • **Gate Times:** 0.01, 0.1, 1 & 10 secs (10MHz & 100MHz range); 0.128, 1.28, 12.8 and 128 secs (1GHz range) • **Max Resolution:** 0.1Hz (10MHz range); 1Hz (100MHz & 1GHz range); 0.0001µs (period mode) • **Display:** High brightness 8-digit LED display, overflow indicator, usec and kHz annunciators, leading zero blanking • **Sensitivity:** 1M ohm input: better than 20mV RMS from 10Hz to 20MHz; rising to 70mV RMS at 100MHz • Input Impedance: 1M ohm input: 1M ohm/10pF for signals less than 1V p-p; 180k ohm/20pF for large amplitude signals • **Overload:** 1M ohm input: 250V RMS for frequencies up to 10MHz (short term only), dropping to 25V RMS at 100MHz • **Accuracy/Stability:** Typical uncalibrated accuracy with a good quality crystal is ± 10 parts per million (ppm) at 25°C with a temperature stability of ± 12.5 ppm from -20°C to +70°C • **Power Requirements:** 240V AC 50/60Hz

Cat. KC-5013

\$299



Function Generator with digital readout

Ref: EA April 1982

This attractively housed (matches the KA-1390 DFM) unit produces sine, triangle and square waves over a frequency range from below 20Hz to over 150kHz with low distortion and good envelope stability. It has an in-built 4 digit frequency counter for ease and accuracy of the frequency setting.

SPECIFICATIONS

Frequency Range
Output Level
Output Impedance
Waveforms
Sine Wave Distortion

Square Wave Rise Time
Overshoot, etc
Readout Accuracy
Amplitude Stability
Power Consumption
Cat. KA-1428

From below 20Hz to 170kHz in 3 ranges
Continuously variable from 3mV to 2.5V p-p
600 ohms (nominal)
Sine, Triangle, Square
Less than 0.7% at 1kHz, 1% at 10kHz and 2% at 100kHz
0.4µs (8V/µs at maximum output level)
Negligible overshoot, droop or ringing
 $\pm 2\% + 1$ digit
Better than 0.1dB on all ranges
7 watts at 240V AC

\$129.50



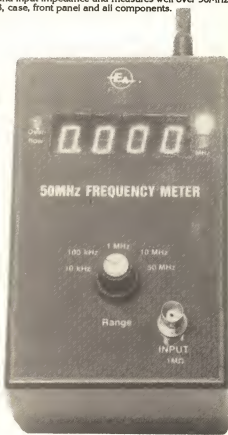
50MHz Digital Frequency Meter

Ref: EA May 1988

This kit is inexpensive, easy-to-build, featuring a 4 digit display offering high sensitivity and input impedance and measures well over 50MHz. Kit includes PCB, case, front panel and all components.

Cat. KA-1702

\$79



50/500MHz Digital Frequency Counter

Ref: EA Dec 1981/Jan 1982

This is a high performance unit that is also easy to build! This design uses just 5 IC's, measures period and frequencies up to 500MHz (with prescaler). It features a bright 7 digit display and outperforms ready built units costing 2 - 3 times more! We believe that the Joycar version of this kit is by far the best. Not only do we supply 2 x GOLD plated BNC input connectors we supply a special pre-punched heavy plastic front panel that is screen printed in epoxy ink. The assembled unit looks a million dollars! Watch out for kits that only provide cheap front panels. The standard kit will work to 50MHz.

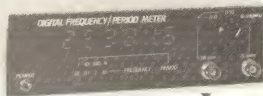
SPECIFICATIONS

• 0 - 10MHz, 0 - 50MHz & 10 - 500MHz (optional) • Switch selectable frequency or period measurement • 10mV RMS to 30MHz; 100mV RMS @ 50MHz; typically less than 200mV on 500MHz range • 1M ohm/50pF on 0 - 10MHz and 0 - 50MHz range; 75 ohms on 10 - 500MHz range • 1Hz on 0 - 10MHz range, 10Hz on 0 - 50MHz range, 100Hz on 50 - 500MHz range • 0.01s, 0.1s, 1s, and 10s update times 0.2s longer • Typically better than 0.005% ± 1 count uncalibrated • 240V AC 7 watts

Cat. KA-1390

\$169.50

PRESCALER - a 500MHz prescaler kit (which fits straight on to the main circuit board) is available...
Cat. KA-1392 \$46.50



High Impedance AC/DC Millivoltmeter

Ref: EA December 1987

This easy to build instrument will measure AC and DC signals down to a couple of millivolts, with negligible current loading. This kit is inexpensive to build, has an input impedance of about 7M ohms and a minimum range of 10mV. This makes it an ideal instrument for testing signal paths and offset voltages in circuitry containing op-amps or transistors. Other features included are battery test and meter zero positions and a reverse polarity indicator for the DC ranges. The meter scaling and range switch have been calibrated in 10dB steps. Kit is absolutely complete, box, meter, meterscale and all components supplied. Cat. KA-1695

\$46.50



Low Distortion Audio Oscillator Metered Version

Ref: EA December 1986

This is the best ultra-low distortion oscillator that Electronics Australia has ever produced. It is comparable with the very best laboratory standard sine wave equipment but by building it yourself you get one for a fraction of their cost. As well as having very low distortion, it has square wave output and excellent envelope stability. Kit includes pre-punched and silk screened metal front panel, box, meter and all parts. KA-1677

\$165

Performance of Prototype

• Frequency Range: 10Hz to 100kHz in 4 ranges • Output Level: 3V RMS max • Attenuator: 0dB, -10dB, -20dB, -30dB, -40dB, -50dB plus fine adjust • Output Impedance: 600 ohms • Output Waveforms: Sine and Square • Sinewave Harmonic Distortion: 20Hz <0.0075%; 100Hz <0.0015%; 1kHz <0.001%; 10kHz <0.002%; 20kHz <0.005%; 100kHz <0.02% • Square Wave Rise and Fall Times: 50ns



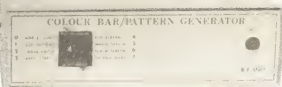
TV Colour Bar Pattern Generator

Ref: EA October 1987

One of our best selling new projects. Easy to build colour bar and test pattern generator, switchable for both servicing and closed-circuit or amateur TV. It provides high performance at a very reasonable cost. It will provide 8 different patterns and colour bars, red screen, white screen, black screen, cross-hatch, vertical lines, horizontal lines and dot pattern. Synchronisation and blanking are to IRCC (International Radio Consultative Committee) standards.

Kit is supplied with laser cut and screened front and rear panel, box, thumbwheel switch, RF modulator and all components except plugpack. (Unit requires 12V AC @ 500mA. Cat. KA-1691)

\$159



In-Circuit Transistor Tester

Ref: EA September 1983

Have you ever unsoldered a suspect transistor only to find that it checks OK? Troubleshooting exercises are often hindered by this type of false alarm. You can avoid these hassles with the "In-Circuit Transistor, SCR and Diode Tester". The kit does just that, test drives WITHOUT the need to unsolder them from the circuit! VERY HANDY! The Jaycar kit includes a Jiffy box and Scotchpal panel showing truth table for device checking. Cat. KA-1119

\$21.50



Transistor, FET and Zener Tester

Ref: EA February 1988

This handy tester will check the following: Bipolar transistors, junction FETs, Mosfets, Zener diodes, rectifier diodes and detector diodes. Using some ingenuity you can check low power SCRs and PUTs. Testing procedures are clearly outlined in the instructions supplied with the kit.

Kit includes PCB, box, front panel, meter and meter scale and components. Requires 6 x AA batteries.

Cat. KA-1698

\$55



Zener Diode Tester

Ref: EA July 1979

This handy tester will enable you to actually read the zener voltage of any zener diodes up to 60 volts via your digital multimeter. Now you don't have to decipher those cryptic zener diode part numbers! This tester will also check LEDs. Supplied in a small jiffy case with all required parts and instructions. (A multimeter - not supplied - is also required to use this piece of equipment.) Cat. KA-1230

\$16.95

Simple Signal Tracer for Audio & RF Work

Ref: EA August 1985

This simple piece of test equipment enables you to troubleshoot both audio and RF circuits by detecting signal paths. When the signal stops - start looking for trouble! It is portable, battery operated and contains both RF probe and inbuilt speaker. The Jaycar kit includes box, probe and other components necessary to build this project. Cat. KA-1220

\$27.95



Voltage and Continuity Tester

Ref: EA November 1987

This handy voltage and continuity checker belongs in every toolbox. It tests AC and DC voltages and also continuity in wires and cables. It will measure 6V, 12V, 24V, 48V, 110V, 240V and 415V, both AC and DC. There is also a polarity indication, and in the case of AC, both polarity LEDs will light up. Whenever a voltage is measured there is also a "beep" tone. The continuity tester is selectable by a switch. The continuity of a wire is indicated by an audio visual signal: both a beep and a glowing LED. The kit is complete with box, Scotchpal panel, probes, PCB and all parts. Cat. KA-1694

\$29.95



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OR BRUCE ROUTLEY
NOW ON
(02) 747 2022

Bench Amplifier and Signal Tracer

Ref: EA April 1988

This kit will prove invaluable to the serious hobbyist. The amplifier requires a high input impedance (over 1M ohm) to minimise loading and selectable various input sensitivities - 10mV, 100mV, 1V and 10V. Included is a overload indicator, as well as facilities for connecting an external speaker. A 4 ohm speaker is required and will produce a surprising high volume when driven by the Bench Amp.

Kit includes PCB, box, front panel, loudspeaker and all parts except the AC plugpack.
Cat. KA-1699

\$39.95

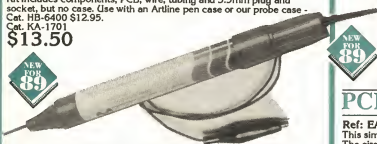


Ref: EA May 1988

This kit is designed to be used with the Bench Amp & Signal Tracer or it can be used with an audio amplifier. Simple to build, this kit becomes a sensitive AM signal tracer.

Kit includes components, PCB, wire, tubing and 3.5mm plug and socket, but no case. Use with an Artline pen case or our probe case - Cat. HB-6400 \$12.95.

Cat. KA-1701
\$13.50



Beepo- Continuity Tester

Ref: EA February 1989

This really is the all singing all dancing continuity tester kit. It features three tones, operation over six decades of resistance, auto polarity reversal and an ambient current so low that it needs no on/off switch - all in a tiny low-cost package which fits easily into a pocket or toolkit. The kit includes PCB, box and all specified components. Batteries extra (Cat. SB-2369 \$4.75 for 4 alkaline).

Cat. KA-1710
\$19.95



Power Transistor Tester

Ref: EA May 1988

Most small transistor testers cannot check power transistors properly. This tester kit, though deceptively simple, can evaluate the current gain and Vbe of all popular power transistors - and even power Darlingtons. Kit includes all parts from parts list and Scotchlok front panel. Power supply is not included. (Requires 12V DC)

Cat. KA-1700
\$22.95



Transistor Beta Tester

Ref: Silicon Chip February 1989

You can measure the gain of any bipolar transistor with this simple Beta Tester. Just connect a transistor, push the button and rotate the knob until the LED goes out. Then read the transistors Beta off the scale. You can match transistors easily also, for an audio amplifier for example. The Beta Tester will also identify the leads of unknown transistors. Kit includes PCB, box, front panel, and all specified components.

Cat. KC-5047
\$18.95



PCB Shorts Locator

Ref: EA February 1989

This simple kit will help you locate shorted tracks on a printed circuit. The circuit provides a variable audible indication of the resistance between the test probes, which is extremely useful in quickly locating the shorts.

Kit includes PC board, box, front panel and all specified components. Test leads are optional. (Cat. WT-5316 \$4.95)

Cat. KA-1712
\$22.95



Capacitance Adaptor for your DMM

Ref: Silicon Chip Nov '87

This clever adaptor circuit plugs directly into your digital multimeter. Then simply plug the unknown capacitor into the test terminals and read the value in picofarads (pF) or microfarads (μ F) directly from the digital display. Ideal for checking suspect or unmarked capacitors and to select critical values. It will measure values up to 2.2 μ F in two ranges 0 - 2200pF (0.0022 μ F) and 0 - 2.2 μ F. Don't be worried by the 2.2 μ F upper limit - capacitors with values greater than 2.2 μ F are usually clearly marked and seldom require testing. Kit includes PCB, all components, box and Scotchall front panel. Cat. KC-5010

\$27.95



Low Ohms Tester for DMM

Ref: Silicon Chip Feb '88

This low ohms tester plugs straight into the terminals of your digital multimeter, and can accurately measure resistance values from 1k ohm down to 0.01 ohm. There are many situations where accurate low resistance measurements are necessary. These include checking meter shunts, designing loudspeaker crossover networks and amplifier output stages, servicing power supplies and any circuitry where low value resistors are used. Kit includes PCB, box, front panel, banana plugs and terminals and all components. 9V 216 type battery required. Cat. KC-5023

\$29.95



Low Cost Temperature Probe for Multimeters

Ref: EA January 1988

This is an easy to build temperature probe which adapts a multimeter or electronic voltmeter into a general purpose thermometer. Great for measuring the temperature of heatsinks, transistors, if Johnny has a fever, etc. Prototype was tested from -20° to 120°C at 1% accuracy. The best thing about this kit is its low price. Complete with PCB all components, box and Scotchall panel. Requires 9V battery. Aluminium tube not supplied. Cat. KA-1696

\$19.95



ETI Temperature Probe for Multimeters

Ref: ETI June 1983

This simple add-on project extends the function of your multimeter to the measurement of temperature. It is particularly suited to digital multimeters. It can be used to measure temperature over the range from -55 to +150°C or better. The Jaycar kit includes the Jiffy case and Scotchall front panel. The AD590 is supplied but not the probe case which is in the plastic case of a BIC biro. Cat. KE-4033

\$32.95



Upgraded Digital Capacitance Meter

Ref: EA August 1985

Every serious hobbyist should have one. This is the improved version of the very popular March 1980 design. Checks values from 1pF to 99.99 μ F over three ranges. Now included is a nulling circuit which operates on the μ F range as well as the nF and pF ranges and eliminates the 'bobbles' between 0 and 1 that occurred in the old model. Matches our other test equipment kits - Frequency Meter, Function Generator, Power Supplies, etc. Kit also incorporates a bright 4 digit LED display. Simply connect the capacitor to be tested to the input terminals and select the appropriate range. Will test tantalums as well as electrolytics. The Jaycar kit includes attractive punched and screened front panel, 3 specially selected capacitors for calibrating unit, box, PCB and all parts. Cat. KA-1595

\$85



Low Cost Capacitance Meter

Ref: EA August 1988

With this nifty kit you can turn your digital or analogue multimeter into a direct-reading capacitance meter. It will read any unknown capacitance in the range from 3.3pF to 2000 μ F in two ranges. One range reads picofarads and the other nanofarads. It will measure polarised capacitors such as electrolytics and tantalums as well as non-polarised varieties.

Cat. KA-1706

\$16.95



Train Controller

Ref: Silicon Chip April/May 1988

Probably the best train controller kit we've seen. Totally versatile, its variations of use are limitless. It incorporates a walk-around throttle which is ideal for large layouts. It is simply unplugged from one socket to another around the layout, and the memory keeps the train going while unplugged. You can have as many sockets as you like.

Other features include:

- Pulse power for smooth and reliable low speed operation
- Monitoring of motor back-EMF for excellent speed regulation
- Adequate power for double and triple heading of locos
- Inertia (momentum) so that the model acts as though it had the sizable inertia of a real train
- Full overload including visible and audible overload indicators (short circuit duration: one minute)
- Power and track/direction LED indicators
- Provision for maximum output voltage adjustment (to suit Z scale)
- Fixed 12V DC output for accessories

Kit includes PCB, mains transformer, case and panel for walk-around throttle, aluminium panel and all specified components. Cat. KC-5028

\$89



Disco Light

Ref: Silicon Chip July 1988

Now you can have all the exciting light show effects of disco's in your home.

The Discolight will drive 4 separate channels of light - 600 watts per channel. It can be driven directly from a speaker or by the built-in microphone. It can also produce all sorts of light patterns on its own including chasing - so, between songs it does its own thing to entertain.

MAIN FEATURES

- Four light channels controlled by four separate audio channels
- Forward, reverse and auto-reverse chaser patterns
- Simultaneous strobe on all four channels
- Alternate light mode
- Music modulation available on chaser, strobe and alternate modes
- Adjustable rate for chaser, strobe and alternate modes
- Inbuilt microphone for beat triggering or audio modulation of lights
- Direct inputs for beat triggering or audio modulation of lights
- Sensitivity control
- Internal resettable sensitivity levels for each channel
- Front panel LED's mimic light display

Electrical Features

- 2400W maximum lamp load
 - 600W maximum lamp load in each channel
 - Fused mains supply to lamps
 - Isolated tab Triacs for extra safety
 - Opto-coupled Triac triggering for complete isolation of control circuitry from 240V AC mains supply
 - RF interference suppression components on each light channel
 - Zero voltage switching of Triacs used for unmodulated chaser, strobe and alternate modes - for minimum radio interference
- Kit includes PCB, case, punched and screened front and rear panels and all specified components.

Cat. KC-5032

\$159.50



3 Band Shortwave Radio

Ref: EA January 1987

This is a great project for the budding SWL or amateur or anyone. Although there is one IC, you'll have to get down to the nitty gritty of kit constructing: Winding coils, aligning and tuning. When that is done you can tune into many international broadcasts operating on the shortwave bands. As it stands, this receiver can tune from 0.48MHz to around

17MHz in 3 bands

Band 1 - 0.48MHz to 1.9MHz

Band 2 - 2.15MHz to 7.7MHz

Band 3 - 6.12MHz to 17.12MHz

The project features high sensitivity and high performance at low, low cost. Any DC voltage between 11 and 20 volts is suitable.

Kit includes PCB, all components, box and silk screened and punched front panel.

Cat. KA-1681

\$79.50



Vocal Cancellor

Do you think you can sing? How would you like to be the lead singer in a famous rock group (or any group)?

You can cancel out the lead singer from almost any stereo record and substitute your own voice or musical instrument. Complete kit includes case.

Cat. KA-1430

\$24.95

Ref: EA April 1982



Mini Mitter

INCREDIBLY POPULAR KIT - STEREO!!

Ref: Silicon Chip October 1988

The Mini-Mitter is a miniature stereo FM transmitter using just one IC and powered by one 1.5V penlight cell (which lasts for months). You can connect your CD player (or record player) to the Mini-Mitter and then listen to your favourite CD's or records anywhere in the house, via your Walkman personal portable.

Also ideal for playing CD's in your car - via your portable CD player and your car stereo/radio. The Mini-Mitter puts out 200 microwatts. The Jaycar kit includes PCB, case, front panel and all component parts. Beware of inferior kits.

Cat. KC-5041

\$34.95



Hands Free Speakerphone

Ref: Silicon Chip September 1988

With the speakerphone you can have relaxing conversations without the need to hold the phone to your ear. If you are put on 'hold' you can continue with your work while you wait. If you are talking to friends or relatives, especially overseas calls, other people with you can listen in, or join in the conversation instead of each family member waiting for their 'turn'.

The speakerphone connects to your existing telephone via a double adaptor (Cat. YT-6020 \$4.95) and gets its power from the telephone lines - no power supply needed.

Kit includes PCB, case, screened and punched front panel and all specified parts.

Cat. KC-5040

\$89



Add a Headset for Speakerphone

Ref: Silicon Chip November 1988

Ideal for office situations where other people may be distracted by the two way conversation.

These headsets have been especially imported by Jaycar for this project. They are lightweight, designed for telephone use and only have one earpiece for comfort and still allows conversations with other workers. The boom is fully adjustable for the best position. Only a couple of minor modifications are required to the original speakerphone circuit to accommodate the headset. Stereo plug adaptor required - Cat. PA-3590 \$1.95.

Cat. AA-2018

\$16.95



Active "Direct Injection" DI Box

Ref: EA October 1987

Our new low cost DI box offers performance and facilities only found on the most expensive units. It converts a high impedance unbalanced input to a low impedance balanced output.

FEATURES

- Will run on Phantom power
- 9V battery is switched off via input jack, so when microphone is disconnected so is the battery
- Earth lift
- Kit includes die cast box, Scotch label, Cannon and 6.5 connectors, switches, PCB and all components.

Cat. KA-1690

\$39.95



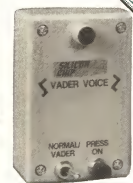
Vader Voice

Ref: Silicon Chip Sept. 1988
You can sound like Darth Vader or a number of other diabolical characters from the nether regions of the galaxy.

This kit is housed in a jiffy box and has a mic insert mounted through the case. There is an amplifier and a speaker included, so you just have to speak into the box and sound like Darth Vader. Great for both big and little kids.

Cat. KC-5039

\$19.95



Electronic Crossover

Ref: ETI June 1988

This kit is based on an unusual, but very versatile and inexpensive circuit, but above all it is extremely simple to build. It can be configured in two basic ways, to give either a 3 way or two 2 way systems.

Kit includes PCB and all components which mount on the PC board.

Cat. KE-4733

\$39.95

Metronome with Accented Beat

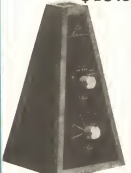
Ref: EA November 1987

A metronome is a must for people learning music. This classy metronome will provide a steady accented background beat, which is variable from 42 to 208 beats/sec. Features an accented beat every second, third, fourth or all of them can be accented.

Kit is supplied in a short form version, so you can build it into whatever you like. PCB, speaker, switches and all components supplied, but no woodwork.

Cat. TA-3993

\$19.95



"Syntom"

A Jaycar Special Project

The Syntom is a very effective drum synthesiser that can produce a variety of fixed and falling pitch effects, triggered either by tapping the unit itself, or by striking an existing drum to which the device is attached. Four potentiometers give control over different characteristics of the sound. The decay pot governs the time taken for the sound to die away after each strike, from less than 1/10 sec. to several seconds, giving a wide range of envelopes. The frequency of the note is variable over the entire audio range by means of the pitch control, and the sweep control introduces a voltage causing the pitch to fall as the amplitude decreases. These controls, when used in combination with each other enable the most popular drum synthesiser effects heard on commercial recordings to be obtained. Power requirements 9V 216 battery. Kit includes PCB, all components, case and Scotch label front panel.

Cat. KJ-6502

\$42.50



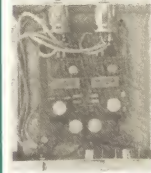
Audio Balanced Line Driver

Ref: AEM July 1987

This kit is a dual channel (stereo) unbalanced input to balanced line output driver. Ideal for driving an active loudspeaker system where the power amp(s) are in with the speakers. Other applications for the unit include PA systems where line level signals have to be conducted over long distances, and bridging a pair of amplifiers. Kit includes, DIN, RCA & Cannon sockets, box, PCB and all parts including the expensive LH0002CH's.

Cat. KM-3060

\$99.50



CD Headphone Amplifier

Ref: Silicon Chip April 1988

If your CD player doesn't have a headphone socket, or if it has a headphone socket and no volume control this is the ideal kit for you. Simply connect via the RCA leads. Suitable for high and low impedance headphones. Signal to noise ratio better than 95dB. Harmonic distortion better than 0.001%.

Kit includes PCB, front panel, zippy box and all specified parts. 12V AC power supply required - Cat. MP-3020 \$14.95

Cat. KC-5029

\$24.95



Effects Unit For Musicians featuring BBD

(Bucket Brigade Device)

Ref: EA June 1983

Achieve brilliant sonic effects phasing, flanging, reverb and echo. Whether you're a professional musician or an aspiring amateur, this unit will add a whole new dimension to your music.

Three input sockets are featured, each with different input signal levels. These might be used for electric microphone, electronic guitar and line input.

ECHO - Circuit has two categories of echo effect 'single' (phaser) and 'reverb' (flanger). SINGLE ECHO - Original signal is presented to the output of the unit together with a delayed version of the signal. Adjustable delay between 1mS and 25mS.

PHASING - Achieved by mixing original signal with an echo of relative short delay.

REVERB - If a certain amount of delayed signal is fed back to the input of the delay stage, it is possible to achieve multiple decaying echoes. Some extraordinary and varied sounds can be produced by the adjustable depth control.

FLANGING - With a short echo delay and maximum reverb depth, flanging is achieved. This is a more profound version of phasing and makes the music sound as though it's travelling down a long piece of drainpipe. Kit includes PCB, box, front panel, transformer and all components, even IC sockets.

Cat. KA-1522

\$115

Beginners Bench Amplifier

A very stable and reliable amp designed by David Tilbrook. This amp features a LM301 IC preamp and rugged TIP31/32 output devices. It is intended as a 'Bench' amp, i.e. to test out other gear that you have built. It gives a loud output and can also be used as a Hi Fi amp (not stereo). The only part not to mount on the PCB is the volume control pot, virtually guaranteeing that the amp will work first time. It only needs a 9V battery to run.

Cat. KS-8105

\$16.95

Guitar Phaser

A Hobby Electronics Project
Most musicians are familiar with the swishing, almost oily effect known as 'phasing'. This phaser is a low noise design drawing very low power. Incorporates rate control and heavy duty bypass foot switch. Unit is turned on when an input is connected and off when it is removed. Complete kit and die cast box supplied. (9V battery required).

Cat. KS-8102

\$39.95

AEM 4600 Dual Speed Modem

Ref: AEM December 1985

This project enables you to construct a modem that operates at either 300 baud full duplex or 1200/75 Baud half duplex (i.e. CCITT V.21 Orig; CCITT V.21 Ans; CCITT V.23 (mode 2) Orig & CCITT V.23 back) for a fraction of the price of equivalent built units. The device simply connects to the RS-232 serial port of your PC to enable you to communicate to other PC users. Swap programs - do what you like. Also talk to Bulletin Boards or Telecom's Vtel service. (Most of Australia's public data communications is V.21 or V.23). The Jaycar kit uses all the original components and after much field testing has been debugged. It works well. Cat. KM-3040

\$169



Super Simple Modem

Ref: AEM September 1986

We have been asked so many times for this kit, we have decided to include it in our 1988 line-up. This simple to build modem features operation of the popular communications standard of 300/300 full duplex plus 1200/75 half duplex, providing access to many of the bulletin boards and public dial-up data systems, Vtel and other Videotex systems. This project is designed around the 7910 world modem chip. Kit includes box, Scotchclad front panel, line transformer, RS232 socket and all components including the 7910. The plug-pack is extra - Cat. MP-3020 \$13.95. Cat. KM-3046

\$85



TTL-Analog Video Converter

Ref: EA February 1989

This kit will allow you to use any analog RGB colour video monitor as a CGA monitor for your IBM PC or compatible. The cheapest CGA compatible colour monitors cost around \$500, EGA costs even more, so many IBM users end up staying monochrome. It can even be used with composite video monitors or conventional colour TV sets - although these will need to be modified to accept RGB signals. But as RGB drive to the picture tube is a fundamental part of any colour monitor or TV, this should not be a problem.

SPECIFICATIONS

Input
Outputs

TTL RGB - (IBM CGA)

1 x analogue RGB, positive, 3V p optional buffered TTL

output

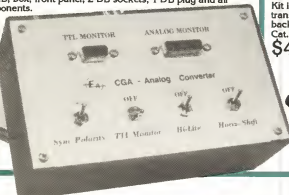
Composite, selectable polarity with adjustable timing

5V at 100mA

Kit includes PCB, box, front panel, 2 DB sockets, 1 DB plug and all specified components.

Cat. KA-1711

\$49.95



ETI 1601 RS-232 Interface for Commodore C-64 & VIC20

Ref: ETI July 1986

This kit enables you to connect RS-232 to either your C-64 or VIC 20.

Edge Connector to suit

Commodore

Cat. PA-0888 \$6.95

Cat. KE-4722

\$16.95



RS-TRUE-232 Converter for Commodore

Ref: AEM Sept 1987

As above kit, but suited for Commodore. "A" version. Replaces old version because this one derives its power from the computer.

Kit includes PCB, all components and the 25D female and Commodore edge connector.

Cat. KM-3065

\$27.95

Simple PC-Driven Function Generators

Ref: EA January 1989

This is a simple and low cost kit which lets you use your personal computer to generate signals with almost any conceivable waveform. It hooks up to the computer via a standard Centronics type parallel printer port, making it compatible with almost any kind of computer. A valuable insight into the growing trend towards computer driven test instruments.

Kit includes PC board, box, transformer, 25 D plug and backshell and all specified parts.

Cat. KA-1709

\$49.95



ETI 675 RS-232 to Centronics Adaptor

Ref: ETI January 1984

This small project enables you to interface a printer to the RS-232 serial port on your computer. The kit consists of PCB and parts (including a special right angle Cannon DB25 plug) but not the Centronics plug or DIP switches, which are optional anyway.

Cat. KE-4666

\$32.50

Speech Synthesiser for your Computer-AEM 4504

Ref: AEM February 1986

This low cost project uses the SP0256A-AL2 allophone speech processor IC. It will work with a Commodore C-64, VIC2, Microbee or any computer having an 8-bit I/O port. The speech pitch can be adjusted giving ranges from about Kamah! to Joan Sutherland.

The kit includes PCB, speaker, 16 pin IDC DIP header, IC sockets and all board components.

Cat. KM-3042

\$43.50



Mains Muzzler

Ref: Silicon Chip Jan 1989

A line filter kit for your computer which incorporates an effective filter for mains borne interference and a varistor to clip dangerous spike voltages. Kit is mounted on a metal box (different to one shown in photo) and has 4 mains output sockets with a total load of 1kW maximum.

Kit includes PCB, box (HB-5446), 4 mains sockets and all specified components.

Cat. KC-5046

\$55



Listening Post

Ref: AEM July 1985

Our most popular AEM kit so far! This device attaches between the audio output of a shortwave receiver and the input port of a computer. It allows decoding and printing out of morse code, radioteletype (RTTY) and radio facsimile (FAX) pictures. Now you can "eavesdrop" on all those weird signals you find littering the shortwave bands. Get into the international news services print your own weather maps, listen-in on ship-to-shore radio. The Jaycar kit consists of all essential parts to construct the project including Scotchclad front panel and software program for the MicroBee or C-64. Cat. KM-3015

\$39.95



Radio Teletype Modulator

Ref: AEM May 1987

Ideal companion to the very popular "Listening Post" kit (see above). This simple, versatile unit is intended for attachment to a personal computer using software to generate the radio teletype (RTTY) Baudot code characters. The unit is not computer specific, although the method of connection to any given computer will generally be determined by the software in use. Virtually any machine with a TTL level I/O port can be used successfully. PC board and all components supplied. Cat. KM-3016

\$32.50

**JAYCAR
No. 1
FOR
KITS**

24V to 12V Converter for Trucks

Ref: Silikon Chip Dec '87

This 24V to 12V converter can deliver up to 5 amps with very little power loss. It is intended for powering CB radios and radio/cassette players in trucks which normally have 24 volt battery supplies. It's far better in the long run than tapping off the battery banks as this has long term drawbacks on battery life. Kit is complete with all components and metal box. Cat. KC-5017

\$59



NiCad Float Charger

Ref: ETI March 1983

This NiCad battery charger provides a happy medium between fast chargers and constant current chargers. It will bring a set of cells up to full charge from complete discharge in about 12 hours and then automatically drop to a trickle whenever the charging is done. This means full recovery in half a day with safety from overcharging damage. Designed to charge 4 x AA batteries in series, but you can charge different numbers of cells of amp-hour capacities between 250mAh and 1Ah simply by selecting the values of three resistors according to a table supplied with the kit. The project can be incorporated inside a piece of equipment or it can be built into a dedicated charger at very little cost and will run off any power supply of 10 to 22 volts. Kit includes PCB and components only - no hardware. Cat. KE-4029

\$14.95

Etching Kit

Make your own printed circuit boards. This kit contains a bag of Ferric Chloride, a piece of copper clad board and a dolo etching pen. Full instructions are supplied to help you get started making your own PCB's. Cat. KJ-7900

\$9.95

Telephone Intercom Power Unit ETI 291

Ref: ETI February 1988

If you have two of the old Telecom rotary dial telephones, don't throw them away. For less than \$60 you can have a practical home intercom system. Just connect two phones to the output of the ETI-291, spin the dial on one phone to tinkle the bell on the other and talk. No modifications are needed on the telephone and the unit will operate telephones separated by up to a few kilometres. Perfect for houses, shops, factories or wherever a high quality intercom is required. Kit includes PCB, two transformers, two telephone sockets, box and all components. Two core speaker cable is all that is required - Cat. WB-1702 25¢ per metre \$19 per 100 metre reel. Cat. KE-4731

\$49.95



Optical Tacho

Ref: Silikon Chip May 1988

Measure the engine RPM on your model airplane or measure the speed of fans and rotating shafts. It's very easy, there are no wires to connect since the circuit counts pulses of reflected infra red light. You just point the tacho at the propeller or whatever and check the reading in RPM directly on the meter scale. Kit includes PCB, case, front panel, meter scale, meter and all specified components. Cat. KC-5031

\$49.95

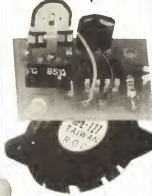


Telephone Ringer

Ref: Silikon Chip Jan '88

Are you tired of the sound of your telephone bells? You can change to a modern sounding chime by building this simple module. If you work in a large office with many phones you can set the tone of your phone so it is distinctly different to all the others. Personalise your phone! Small enough to be installed in just about any phone. Kit includes PCB and all parts. Powered through the phone. Cat. KC-5015

\$19.95



Wireless Doorbell

Ref: Silikon Chip August 1988

Can't hear the doorbell from the kitchen or out in the backyard, or upstairs, or in the garage? Don't want to run wires everywhere to connect a sound source in various places around the mansion?

Then this kit is the answer. Wireless Doorbell! You can use as many sounders as you like all around the house. You can even use more than one transmitter - for example one on the front door and one on the side door. Range is approximately 12 metres. This project can also be used as a remote alert, for example a sick person in bed can have the transmitter close by and the receiver can sit in the kitchen in case of emergencies.

TRANSMITTER kit includes PCB, zippy box and all specified electronics. Cat. KC-5036

\$16.95

RECEIVER kit includes PCB, zippy box and all specified components except 12V plugpack. Cat. KC-5037

\$42.50



30 Volt - 1 Amp Benchtop Power Supply

This design features a modern moulded plastic bench top type case, variable output from 3 - 30 volts and variable current limiting over 2 ranges. Overload protection and switchable voltage/current metering is also provided.

Kit is complete with PCB, box, punched and screened front panel, Scotchcal meter scale, heatsink, meter and all components.

- FEATURES AND SPECIFICATIONS**
- Short circuit protection
 - 3 - 30 volts output
 - 0 - 1 amp output current (variable current limit)
 - Load switching
 - 0.2% load regulation
 - 2mV rms ripple
- Cat. KA-1574

\$89.50



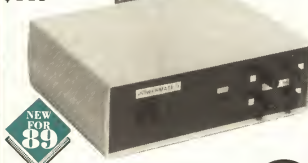
Powermate II

Ref: EA October 1988

Use your CB radio or amateur radio gear at home. This is an updated version of the old powermate power supply. It delivers clean, well regulated 13.8V DC at up to 5 amps. Kit includes PCB, case, transformer and all specified parts.

Cat. KA-1707

\$119



Dual Tracking Power Supply

Ref: EA February 1987

Based on readily available components, this power supply can provide voltages from 0 to $\pm 1.5V$ at currents up to 2 amps. It also features overload protection, a fused $+5V$ 1 amp output, and output voltage metering.

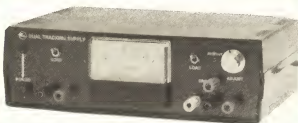
Kit is complete with quality punched and screened metal front panel, Scotchcal meter panel, heatsink, meter and all components.

A high class power supply.

SPECIFICATIONS

- Housed in tough "ABS" Instrument case
 - Fully protected against short circuits, overloads and thermal runaway
 - Employs fold back current protection
 - LED Indicator for regular dropout
 - Voltage adjustable to within 10mV
 - Output $\pm 1.3V$ to $\pm 22V$ @ 2 amps $-5V$ @ 1 amp
 - Load switch
- Cat. KA-1682

\$129.95



Universal Speed Control

Ref: Silicon Chip December 1987

KIT 1

This multipurpose circuit can be used as a speed control for electric drills or fans, as a power controller for electric blankets or soldering irons, or as a table lamp dimmer.

The electronics are PARTIALLY assembled on a PC board. Just connect the mains plug and socket and mount it in a Jiffy box and it's finished. Should take you about an hour. As an added bonus, it incorporates components for suppression of electromagnetic interference.

Complete kit includes pre-assembled PC board, box and front panel, mains cable and plug and socket.

CONTROLS

- Electric drills
- Fans
- Electric blankets
- Lamp dimmer
- Soldering irons

Cat. KC-5016

ALL FOR

\$18.95



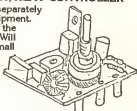
KIT 2 - UNIVERSAL SPEED/LIGHT/HEAT CONTROLLER

As used in the above kit. It is available separately if you wish to mount it in a piece of equipment.

PCB measures 45 x 60mm with most of the components professionally soldered in. Will control up to 3 AMPS (i.e. 750VA). A small heatsink may be required on the TRIAC over 2 amps. Includes assembly/connection instructions.

Cat. KJ-6522

\$9.95



Car Stereo in your Home

Ref: Silicon Chip November 1987

Adapt a surplus car radio/cassette player for use in your home. Decent table type radios are expensive. Converting a car radio to run off the mains is quick and easy and inexpensive. This kit is a power supply to do just that. Kit includes transformer, PC board and all components. You can build it into a mantle table radio very simply using instructions supplied, so dig that radio out of the bottom of the wardrobe. Suggested speakers are Cat. AS-3014 6 x 4" \$10.95 each. Woodwork not included.

Did you know that many car radios have far better RF sections than alleged 'Hi Fi' tuners?

Cat. KC-5012

\$28.95



Universal 15V Power Supply

Ref: Silicon Chip August 1988

This small kit enables you to obtain $+15V$, $-15V$ or $\pm 15V$ DC from a number of different transformer and rectifier combinations.

- Obtain $\pm 15V$ rails from 12V AC plugpack, or 2851 transformer
- Obtain $\pm 15V$ rails from 30V AC centre tapped (MM-2007) transformer

Kit includes PCB and all components for all options listed above.

Transformer not included.

Cat. KC-5038

\$12.95



JAYCAR KITS

where performance is measured in RESULTS...

8 Sector Burglar Alarm

Ref: EA Jan/Feb 1985

This unit costs far less than equivalent commercial alarms. In fact we don't know of an 8 sector commercial unit under \$400. The box has been purposely made by Jaycar and is screened and punched as the inside panel is too. We no longer use the cheaper petty cash box.

The alarm has 8 separate sectors and each can be monitored independently. Each sector is provided with an indicator LED and an on/off switch. The multi sector approach has the advantage that if one sector is triggered and the alarm cycle has run its course, the rest of the house is still protected by the other active sectors.

The sector disable switches are a great idea. These enable the user to isolate one or more sectors as required. In this way some areas of the house can be used, while others remain protected; e.g. Internal PIRs can be disabled while perimeter sectors remain active, or in a two story house when the family retires for the night the bottom floor can be fully alarmed. Each sector is identical and will accept both N/O and N/C sensors and has end of line resistors, so if a wire is cut, alarm will sound. Two of the inputs have delays.

The alarm has a warning buzzer which warns that the alarm is about to sound. You can adjust this from 5 to 55 seconds. Ideal if you forget to switch the alarm off upon entry. When triggered, the alarm drives a horn speaker for between one and 15 minutes, and also trips a relay which can turn on a bell or TV camera, etc. Alternatively, you can have a silent alarm in which the relay can activate a dialler. It has a back-up battery facility (battery not supplied) with a charger circuit. Kit is supplied with mains transformer so you don't need to buy an expensive power supply. Kit is supplied with PCB, all components, switches, power lead, 4 alarm stickers, horn speaker and case. Options are Gel Battery 1.2Ah Cat. SB-2480 \$22.50. Beware of other kit suppliers that don't supply all of the above.

Cat. KA-1582
\$169

4 Sector House Alarm

Ref: ETI May 1985

This clever design incorporates all the features required in an alarm at a truly low price.

- 4 sectors (2 with delay, 2 without)
- N/O and N/C sensors can be connected to the same sector
- Loaded sectors, so if a wire is cut, alarm will trigger
- Adjustable alarm time
- Will automatically re-arm after going off
- Seven LEDs supplied to indicate:-

- power is on
- at turn on 4 LEDs indicate if each sector is sealed
- after short time any unsealed sectors are locked out and LEDs are extinguished
- if triggered LEDs will indicate which sector
- On board siren driver for horn speaker
- DC 12V lamp output for bell

This is a feature packed alarm. Kit includes PCB, and all components.
Cat. KE-4698

\$29.95

40 Watt 12/230V Inverter

Ref: EA August 1985

This improved design enables you to run small 240V appliances from a 12V car battery with modest current drain. When not in use it can also be used as a mains frequency is crystal generated the inverter is ideal for driving synchronous motor turntables with great speed accuracy.

The Jaycar kit is complete and original to the project article as is usual with our kits. An attractive silkscreen and drilled front panel provided.

Cat. KA-1598

\$99.95



Kit Constructors Manual

A must for amateur constructors. Contains much useful information for the more experienced. Huge amounts of information on construction and identification of parts.

8 pages.
Cat. BI-8200

50¢

Jaycar ELECTRONICS KIT CONSTRUCTORS' REFERENCE MANUAL
50¢

Electric Fences

"ELECTRIC FENCE"

Ref: EA September 1982

Mains or battery operated powered, this electric fence controller is both inexpensive and versatile. It should provide an adequate deterrent to all manner of livestock. Additionally, its operation conforms to relevant clauses of Australian Standard 3129.

Kit does not include automotive ignition coil which is required.
Cat. KA-1109



\$23.50

ELECTRIC FENCE CONTROLLER

NEEDS NO AUTO COIL!

Ref: EA December 1985

This electric fence controller is a considerable development over older designs (which is still currently available). Because this new circuit uses a special output transformer it is far more likely to work well into false loads such as tall grass or dirty insulators. The new circuit has also less current drain but far higher overall performance.

The Jaycar kit is supplied with a slightly different box than shown in the illustration. Also included is a length of HT cable and heavy HT connecting clip.

Cat. KA1660

\$59.50



12-230 Volt Inverter

Ref: EA September 1985

This compact design features a toroidal transformer, automatic self starting, current limiting and thermal overload protection.

The applications of an inverter are many and varied.

- On the farm for electric drills, soldering irons, welding, etc., where mains is not available
- Building sites for drills, sanders, saws, etc., where a long extension cord is dangerous
- Remote outback for powering audio and video equipment, lights and power tools.

FEATURES: • Small toroidal transformer - unit can be carried in one hand. Previous inverters were huge. • LED indicators on front panel which indicate if voltage is regulated, if circuit shuts down due to thermal overload, if excessive current is drawn, in which the inverter automatically reduces its output voltage to limit output current. • Unit consumes virtually no power until an appliance is switched on, the circuit then starts automatically.

This is an excellent kit, which works extremely well and is straight forward in its assembly. We have sold thousands. Kit includes punched and screened front panel, double mains point, toroidal transformers, everything to complete the kit.

SPECIFICATIONS:

• Nominal supply voltage: 12V DC • Frequency: 50Hz crystal locked • Maximum Load: 300VA • Current Limiting: 30A (primary) • Standby Current: 550uA.

LOAD (W)	OUTPUT VOLTAGE (RMS)	INPUT CURRENT (A)	BATTERY LIFE 40Ah/20hr (Minutes)
40	240	4.8	240
100	250	11.9	80
200	240	21.7	50
300	230	30.3	28

\$269

Cat. KA-1610

For those of you who don't have the time to build it, we have it available completely assembled.
Cat. MI-5000
\$379.00



Protector Car Alarm

Refer: Silicon Chip Feb 1988

This refined car burglar alarm has just about every feature you could want, and is easy to build. Included are a number of features which, to our knowledge, are not included in commercial alarms but which are very effective theft deterrents.

MAJOR FEATURES:

- Delayed input to monitor all doors
- No delayed (instant) input to monitor boot and bonnet
- Automatic cut out and reset after alarm has been triggered. Siren sounds for 90 seconds and stops, but is adjustable.
- Ignition killer. As soon as alarm is triggered ignition is disabled.
- Separate siren alarm. Instead of using the cars horn, which can be easily disengaged, alarm has provision for a separate siren which can be mounted in an inaccessible place under the bonnet. (Siren not supplied).
- Separate internal alarm. An unbelievably loud piezo screamer (116dB) is mounted inside the vehicle making it unbearable for the thief inside the car. (not supplied).
- Back-up battery. Facility for a back-up battery if main battery is disconnected. (not supplied with kit).
- Battery sense. Alarm monitors the input from the main battery at all times, and if this is disconnected the alarm will sound.
- Ignition sense. Any attempt to start the vehicle (supposing that the thief has entered by opening a door, letting the alarm time out, and then coming back to have another go) will trip the alarm and immobilise the vehicle.
- Dashboard flasher. A rectangular red push button switch/light is supplied.

Alarm is turned on/off by a hidden switch only.

Kit Includes - PC board, box, Scotchcal panel, 2 relays, flasher switch/light, bonnet switch, 2 alarm stickers and all components.

Extras required are:

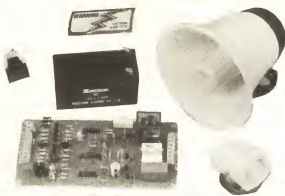
Inside 116dB piezo screamer Cat. LA-5255 \$17.95

Outside siren and driver Cat. LA-5700 \$26.50

Back-up Battery Cat. SB-2480 \$22.50

Cat. KC-5021

\$79.50



"Screecher" Car Alarm

THOUSANDS SOLD

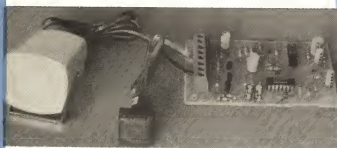
SCARE THE PANTS OFF WOULD BE THIEVES!

This car alarm is fitted under the dash of the car and is designed with a new deterrent strategy. When a thief breaks in (after entry delay) an unbelievably loud shrill sound goes off - INSIDE THE CAR making it too unbearable to proceed with stealing the car. The thief will be scared witless by the deafening noise of a demented 116dB monster canary. The alarm has a dash lamp flasher, exit and entry delays, a three-second soft alarm to remind you to turn it off, and automatic resetting. Two inputs are provided. Both respond to a change in state, whether from high to low or vice versa. To keep installation really simple, the circuit just uses a basic on/off switch which is hidden.

The Jaycar kit includes the direct import 116dB screecher, dash lamp, PCB and all components.

Cat. KA-1675

\$34.95



Remote Control for Protector Car Alarm

NEW FOR \$9

Ref: Silicon Chip Mar. 1988

Build this kit and you can turn your car burglar alarm on and off remotely, or anything else for that matter. Remote control offers improved security, no need for hidden switches and allows the elimination of entry and exit delays.

Kit includes: RX and TX PCB's, case for TX, 2 relays and all specified parts except RX case and panel, piezo siren and piezo transducer.

MAIN FEATURES

• UHF transmitter and receiver on 304MHz

• Two versions of the handheld Transmitter

• Single button to activate and disable alarm

• 40 metre transmitter range

• Trinary digital coding with 13, 122 codes for security

• Multi-optioned receiver (build it as you want it)

• Relay switch-on and off for any burglar alarm

• Momentary traffic indicator flashing for alarm set

• Piezo alarm or siren for audible indication of alarm set

Cat. KC-5034

\$79.50



Deluxe Car Burglar Alarm

Ref: EA May 1984

This unit provides a very comprehensive array of facilities viz:

• Two delayed inputs, six instant

• 10 second delayed exit, 10 second delayed entry

• Provision for auxiliary battery

• Alarm trips for 2 minutes with automatic re-arming at end of alarm time

• Alarm output: 1kHz tone modulated at 100Hz and 1kHz driving an 8 ohm speaker (i.e. no separate siren driver required).

• Only 13mA current consumption, 500mA when alarm is triggered

• Flashing dash panel lamp, operated on/off switch, provision for two-way protection

The Jaycar kit includes all board components, specified case and Scotchcal front panel. Inc. siren.

Cat. KA-1550

\$89.50



Ultrasonic Movement Detector

Ref: EA August 1984

Designed to be used with the EA deluxe car alarm kit (KA-1550). Will provide added protection against illegal entry and will trigger the alarm if a window is broken or if there is any movement inside the vehicle. It can also be used with some commercial alarms.

Kit is supplied with PC board, case and all components including the transmitter and receiver.

Cat. KA-1556

\$34.95



Deluxe Red Light Flasher

This kit is simply the easily-identifiable pushbutton square dash mounted switch with a flasher circuit on the back! Very sneaky! You get the deterrence of a flashing red light (the original light switch as used on the real alarms) but without the cost or installation hassle of a full alarm. Kit includes 2 BONUS car alarm window stickers.

Cat. KJ-7000

\$19.95



Dashboard Car Alarm Lamp Flasher

This is the alarm you fit when you don't fit an alarm. It simply operates a flashing light on your car's dashboard, which, hopefully will discourage car theft.

The Jaycar kit includes two window deterrent stickers to further give the impression that a real alarm is fitted.

Cat. KA-1630

\$12.95



High Energy TAI

(Transistor Assisted
Ignition)

Ref: Silicon Chip May, June
1988

If you still have Kettering (Points) type ignition in your car this project could save you a fortune. This project will enable you to keep the car in tune for a lot longer - even with standard points. You can also convert your car over to a breakerless (Hall-Effect) system (Other parts are required).

This ignition gives extra high energy - essential for today's high revving lean air/fuel ratio ignitions.

- Slightly extra power
- Slightly better fuel economy
- Much better wet/dry starting
- Much greater time between tune-ups

The Jaycar kit includes all original specified components including die cast box, etc.

Cat. KC-5030
\$49.95



Car Safety Light

Ref: Silicon Chip November
1988

is your car in danger of being sideswiped in the street at night? This project detects an approaching car's headlights and automatically turns the brake lights on to warn the driver. It mounts on the rear parcel shelf and soon as headlights are detected on go the brake lights. They automatically switch off about 5 seconds after the car passes. An additional sensor disables the circuit during the day as well as when the ignition is on, so the brake lights work normally. Kit includes PCB, case, relay, two LDR's and all components.

Cat. KC-5044
\$29.95



Car Battery Monitor

Ref: EA May 1987

Don't get caught with a flat battery! This simple electronic voltmeter lets you monitor the condition of your car's battery so you can act before getting stranded. 10 rectangular LEDs tell you your batteries condition. Kit includes PCB board and all components.

Cat. KA-1683 **\$14.95**

Ignition Killer

Ref: EA February 1984

This little project is cheap, easy to fit and effective. It basically is a timer circuit that disables your ignition system a few seconds after it is activated. A would-be thief starts the car, it goes a few metres and stops. He immediately cranks the engine and it fires but it stops again moments later. This could continue indefinitely. Frustrated, the thief looks for easier 'game' elsewhere. The Jaycar kit contains specified original components, instructions and 2 BONUS alarm stickers.

Cat. KA-1535 **\$23.50**

Knightrider LED Scanner

Ref: Silicon Chip Nov. 1988
Most readers would have seen or at least glimpsed the American TV series 'Knightrider'. The hero of the show is a car called 'KIT' which is even more clever than Lassie. The car has a row of red lights at the front which supposedly scan the area in front of it. This kit provides the same light scanning effect using 20 red rectangular LEDs.

A great fun kit to build for the kids or can be used as a back-up to a car burglar alarm. Short form kit - PCB, LEDs, switch & components supplied.

Cat. KC-5042 **\$17.95**

Bosch Rotating Vane for Australian 6 Cylinder Cars

Convert your 6 cylinder Holden or Falcon to breakerless! Over the years many thousands of people have converted their cars to breakerless ignition with our KJ-6655 Hall-Effect conversion kit. Unfortunately this kit would not fit Australian 6 cylinder BOSCH distributors.

To convert your Aussie Falcon or Holden 6 you had to obtain a difficult-to-get Bosch rotating vane assembly. Jaycar now stocks this product. The Bosch unit consists of a soft iron pressed cup with slots cut in it. The H.T. distributor rotor button is incorporated in the unit. You simply pull your old distributor apart, remove the old rotor buttons and points and push the new Bosch unit on (after fitting the Siemens Hall Switch HKZ101 - Cat. ZD-1900 \$34.50). Please note that some customised fitting might be required to fit the Siemens unit to the plate that originally mounted the points.

Cat. XV-2050
\$49.95



pH Meter

Ref: Silicon Chip April 1988

Use this reasonably priced pH meter kit to ensure healthy water conditions for your swimming pool. Also suitable for monitoring fish tanks and soil checking. Kit includes PCB, case, front & side panels, meter and all specified components. pH probe not supplied in the kit.

pH probe and buffer/test solutions - Cat. QP-2230 \$79.95
Kit - Cat. KC-5027

\$49.95



Soldering Iron Temperature Controller

Ref: ETI September 1986

If you have put off buying a temperature controlled soldering iron because they are so expensive, your problems are solved with this low cost soldering iron temperature controller. While this kit may not have all the features of a soldering station, it provides fully regulated, adjustable temperature control over a reasonably wide temperature range. And there is no need to discard the soldering iron that you have now. It will work with just about any conventional 240V iron rated from 20 watts to 75 watts and can easily be adapted for use with higher powered soldering irons.

Complete kit with PCB, all components, case, panel and mains plug and socket.

Cat. KC-4725

\$39.50



ETI 342 Pulse Shaped CDI

Ref: ETI Feb/March 1985

Capacitor discharge ignition systems are much more efficient than conventional or transistor assisted systems, and they're also much better at getting maximum performance from today's engines.

Unfortunately early CDI systems were also unreliable and plagued by problems such as engine cross-firing. Here's a new design which gets around all of the problems, but still gives you all of the benefits.

Engineer Ian Thomas has written one of the best articles we have ever seen on the subject of CDI. This project uses some pretty exotic components - all of which have been sourced by Jaycar. Naturally, the original die cast box is also supplied in our kit, along with all instructions.

Cat. KE-4690

\$79.50



Miniature FM Transmitter

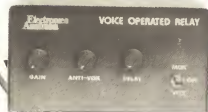
Ref: ETI December 1985

Over the years Jaycar has had heaps of low cost FM transmitters. They all suffer from severe problems of drift, low output and frequency change due to hand capacitance.

This unit is a two transistor two stage transmitter that has the benefits of being VERY COMPACT.

The Jaycar kit contains all specified parts and makes an ideal, inexpensive beginners kit. Cat. KE-4711

\$9.95



**JAYCAR
No.1
FOR
KITS**

Touch Lamp Dimmer

The latest in Hi Tech light switches! Put these in your home and your friends will be amazed.

The touch dimmer replaces your standard size light switch, and all you see is a silver panel the full size of the plate.

To switch the light on and off all you need do is touch the plate anywhere. To dim the light just hold your finger on the plate, the light will stay at whatever brightness it was when you remove your finger. Uses a high tech Siemens IC. The Jaycar kit contains all the necessary components including the small contact spring and HPM wall plate. Watch out for kits that don't supply all the necessary parts.

Cat. KA-1508



\$29.95

Universal Voice Operated Relay

Ref: EA November 1987

Are you an amateur or CB radio operator who is sick of having to push a button on your microphone every time you want to transmit?

Well, this simple device will take the drudgery out of talking for less than the cost of a new desk top microphone!

This easy to build VOX incorporates anti-vox circuitry and features adjustable gain on the microphone and speaker inputs. The delay period before the relay drops out is also adjustable to allow for varying gaps between words and syllables. It can also operate from a wide range of supply voltages, allowing the unit to be powered from the rig to which it is connected if convenient. A switch is incorporated for disabling the VOX to return to manual.

Short form kit includes PCB, switch and all components, but not box, plugs or sockets. Cat. KA-1692

\$24.95

Low Cost Utility Timer

Refer: EA February 1988

Whether you wish your egg soft, but not too soft, or whether you want to add the time factor to a game or trivial pursuit, this utility timer is ideal. With it you can see and hear the time ticking away! The timer can be set for a total period ranging from 10 seconds to 15 minutes. This range can be changed, if required, by changing the values of certain components. The timer has 10 LEDs on the front, which visually shows how much time is left. As each LED is lit, a beep is heard also. If a trivial pursuit question is answered promptly for example, there is a reset button, so the next played can start being timed promptly. A great kit with many uses. Kit includes box, panel, PCB and all components. A 216 9V type battery is required. Cat. KA-1697

\$21.95



Simple 3 Digit (0-999) Counter with LED 7 Segment Display

This kit is great for scoreboards or any counting application. It will count to 999 events and then reset to zero. It can be ganged to count to high numbers. Two kits connected together will count to 999,999 for example. A low voltage pulse between 7 - 14 volts will increment the counter by one digit. A simple counting circuit is included with the assembly instructions. 9V battery required (not supplied). All board components supplied. Cat. KS-8114

\$23.95

Super Timer

Ref: EA December 1988

This kit is a low cost, but very flexible 4-digit timer which can be used to measure intervals from a few microseconds to hundreds of seconds.

Very handy for checking times and speeds involved in all sorts of physical events - like the speed of a slug from an air rifle, a golf ball, or a snail

Kit includes PCB, box and all specified components. Cat. KA-1708

\$59



'Minder' FM Wireless Microphone

Ref: AEM March 1988

Here's an amazingly simple and easy to build but very effective 'wireless' microphone. It can be used with any FM band receiver to listen-in to sounds from some distance away.

It has dozens of uses! Keep an ear on the baby playing or sleeping in its room, or, placed near the swimming pool you can keep an ear in the action poolside.

Kit includes all specified parts. Cat. KM-3068

\$11.95

"Beat Me"

Ref: EA March 1989

This unusual project is actually a metronome that has its rhythm set by simply tapping the unit at the desired rate. You can tap it with a drum stick, pencil - even your fingernail 4 times, and the 'Beat Me' will mimic the rate at which it was tapped indefinitely - so simple!

The Jaycar kit includes case, speaker and all electronic components. It runs on a 9V battery (not supplied). Size: 130 x 68 x 41 mm. Cat. KA-1714

\$29.95



30 + 30 Watt Stereo Amp

INCLUDING PREAMPLIFIER

Fully built and tested with separate bass, treble, balance and volume controls. This superb amp has less than 0.1% distortion. There are inputs for microphone, phono and auxiliary (line) and all power supply components are on board. Just connect a transformer, speakers and a signal - and away you go! Requires 36-38VAC x 2.

Size: 186 x 145 x 40(H)mm

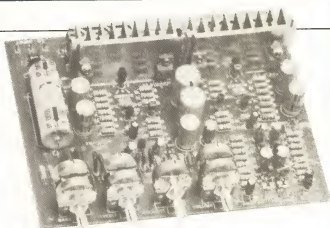
Cat. AA-0300

Transformer to suit

Cat. MM-2010

\$24.95

\$69.95



80 + 80 WRMS Pre-Main Amplifier

A complete preamp and high power amp - with power supply electronics and loudspeaker protector in the one package! All that you need to connect is a power transformer and a signal source.

The AA-0310 features TWO huge heatsinks for the power transistors, bass, treble and mid-range controls, a microphone preamp and mixer pot, balance and volume control. There is a facility for the preamp out (to dub from source to tape) as well as phono out. All in all it's a very well thought out unit. The main board measures 245(W) x 240(D)mm, the heatsinks 130(W) x 75(D) x 70(H)mm are connected to the main amp board by about 150mm of wiring. Power requirements AC 26-32V x 2; DC +35V & +45V 6 amps.

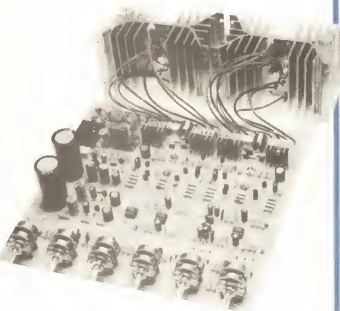
Cat. AA-0310

436 I TYPE POWER TRANSFORMER TO SUIT

Cat. MM-2015

\$69.50

\$169.95



When is a kit not a kit? When it's a mini module!

Jaycar mini modules are not kits under normal definition. Each module is actually built, tested and guaranteed. You still have to connect them to power supplies, signal sources, etc., however, they are still kits and therefore fun to work with.

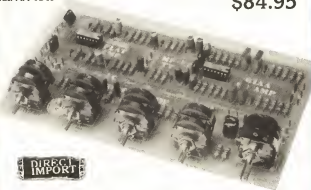
Super Hi Fi BI-FET Preamp

0.005% DISTORTION

This magnificent preamp measuring 200(W) x 110(D)mm has many features: Phono in (RIAA equalisation within 0.2dB), phono out (to tape), and auxiliary input (as many as you like). Provision for switching "loudness" control in or out as well as the provision for a "tone defeat" switch. Bass, treble AND midrange controls are provided, as well as a midrange a 40 detent click type volume control. Naturally frequency response is flat over the audio spectrum and beyond and the S/N ratio figures are outstanding. (Requires $\pm 15V$ 200mA power supply, a circuit for this is included). Size: 203 x 106 x 40(H)mm

Cat. AA-0315

\$84.95



Dual LED Audio Level Meter Assembly

This meter enables you to display power levels from -30dB to +5dB. The meter operates directly from the output of your amplifier i.e. from the speaker leads. It does not consume any amplifier power. The level meter is powered by any voltage between the range 3-20 volts so it is ideal for 12V auto use.

Ten LEDs are provided for each channel, the first 4 LEDs in each channel are green (-30 to -5dB), the next two are yellow (-1 to 0dB) and the next three are red (+1dB to +5dB) a peak yellow LED is also used to indicate an overload condition. The meter can be calibrated to operate on amplifiers from 1 - 200 watts! A circuit for mains power supply is included. Size: 160 x 56 x 20(H)mm.

Cat. AA-0326

\$39.50



6 Watt 'Micro' Amp 1 Channel

AMPLIFY YOUR WALKMAN!

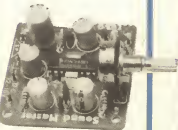
This little amplifier will provide up to 6 watts into 4 ohms from a 15V power supply*. The mighty midjet measures 50mm square and has an onboard volume control. Facilities are provided to accept high or low impedance inputs, i.e. 'low' headphone output of cassette deck, 'Walkman' type unit, etc., and 'high' for standard line level signal sources such as tuners, VCR's, etc. (Regard as 'AUX'). Output is short circuit protected. *A copper heatsink fin must be soldered to the top of the IC to achieve this. Size 50x50x24(H)mm

SPECIFICATIONS

Power Out 6W (max) Into 4 ohms
Input Sensitivity 100mV
T.H.D. 0.5%
Gain at 6V 30dB
Power Supply 4 - 16V @ 1-2A
Cat. AA-0340

\$15.95

(2 required for stereo)



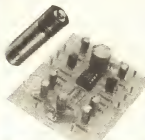
DIRECT IMPORT

Mini Phono & Mic Preamp

This unit features a high slew rate op-amp type gain block 5% RIAA equalisation capacitors and small size 70(W) x 60(D)mm. It will bring up a magnetic phono cartridge or dynamic microphone to line level with very low distortion. Power supply circuit diagrams included.

Power supply 18-22V AC x 2; +30V DC. Size: 72 x 60 x 20(H)mm
Cat. AA-0324

\$22.95



Infra Red Remote Control System

The system comprises two basic components, the handheld transmitter and the receiver. The handheld transmitter is supplied in an attractive plastic case and is powered by a 9V battery. It has a range of 10 metres, approximately. The receiver consists of a circuit board measuring 110(L) x 55(W)mm and requires 9-12VDC. The receiver output is by relay with N.O. or N.C. output. The relay is NOT 240V AC mains rated but will switch considerable DC loads i.e. 5 amps (resistive) at 12-24V or up to 100V AC. An on-board switch configures the unit to either operate only while the transmitter switch is held 'on' or alternatively in latched mode, i.e. press transmit button and switch 'on', press again to switch off.

P.S. It also works as an event counter! Size Transmitter 140 x 68 x 31(H)mm Size Receiver 107 x 57 x 20(H)mm
Cat. AA-0346

\$52.95



Stereo Loudspeaker Protector

An absolute must for all high power amplifiers. If anything goes wrong with a high power amp that is OCL* (i.e. does not have a large coupling capacitor between the final output stage and the speakers) a very high power source of DC can present itself directly across the voice coils of your expensive speakers destroying them probably before a fuse blows. The AA-0320 measuring 85(W) x 55(D) x 35(H)mm draws very little current at 12V DC. (A circuit showing how to connect it inside an existing amp is shown as well as a separate power supply). The protector has a 3 second de-thump turn on delay and a DC fault sense circuit. The protector relay is massive and will not offer any significantly voltage drop in even the highest power amps. Cheap insurance.

*Output capacitor-less. The enormous bulk of Hi Fi and PA amps are now built this way. Power supply DC 12-16V. Size: 90 x 55 x 23(H)mm

Cat. AA-0320

\$27.95



500mW @ 6V Audio Amp

A six transistor 1/2 watt amp for the cost of two hamburgers! It has a two transistor tape preamp which is NAB equalised and a 4 transistor power amp. It has facilities to take line level inputs. The (irregularly shaped) board measures roughly 110(L) x 48(W)mm. Each amp comes with complete schematic and connection diagram. (2 required for stereo).

Cat. AA-0290
10+ \$3.50 ea

\$3.95



Light Operated Switch

This controller uses a Cadmium Sulphide (CdS) cell to detect an ambient light level. The sensitivity is adjustable. When the level of light reaches a certain value the relay (with N.O. or N.C. outputs) switches on, it remains on until the light level falls below a predetermined value. The relay will switch up to 200 watts (resistive) but is not mains rated. Ideal as an event counter. Power supply 9V. Size: 67 x 31 x 17(H)mm

Cat. AA-0344 **\$10.95**



DIRECT IMPORT

400mW General Purpose Audio Amp Bargain

Completely built, the module measures 83 x 35mm, has a high input impedance and high gain. Runs on 9V and requires a 15 ohm load. Supplied with full specs and data. Made in England. Cat. AA-0292

\$3.95

10+ \$3.50 each

NEW FOR \$3.95



Sound Operated Switch

This compact 70(L) x 45(W)mm switch will detect a sharp sound and latch a relay with N.O. and N.C. output. It runs from 9-12 volts and has adjustable sound level sensitivity. Size: 73 x 47 x 17(H)mm
Cat. AA-0342

\$23.50



DIRECT IMPORT

TURN YOUR SURPLUS STOCK INTO CASH!!

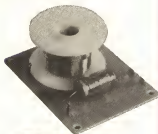
Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

CALL GARY
JOHNSTON OR
BRUCE ROUTLEY
NOW ON
(02) 747 2022

2 Way Crossovers

2 Way Type 1

- Crossover frequency 3,500Hz
 - 6dB attenuation
 - 40 watts RMS
 - 8 ohms
- Cat. CX-2614



\$9.95 ea

2 Way Type 2

- Crossover frequency 5,000Hz
 - 6dB attenuation
 - 40 watts RMS
 - 8 ohm
- Cat. CX-2613



\$9.95 ea

2 Way Type 3

- Crossover frequency 3,500Hz
 - 12dB attenuation
 - 50 watts RMS
 - 8 ohms
- Cat. CX-2612



\$13.95 ea



2 Way Type 4

- Crossover frequency 2,000Hz
 - 6dB attenuation
 - 65 watts RMS
 - 8 ohms
- Cat. CX-2611



\$18.95 ea



3 Way Crossovers

3 Way Type 1

- Crossover frequencies 800Hz, 5,000Hz
 - 6dB attenuation
 - 40 watts RMS
 - 8 ohms
- Cat. CX-2615



\$15.50 ea

3 Way Type 2

- Crossover frequencies 2,800Hz, 8,000Hz
 - 12dB attenuation
 - 50 watts RMS
 - 8 ohms
- Cat. CX-2617



\$18.50 ea

3 Way Type 3

- Crossover frequencies 800Hz, 5000Hz
 - 12dB attenuation
 - 65 watts RMS
 - 8 ohms
- Cat. CX-2616



\$28.95 ea

3 Way Type 4

- Crossover frequencies 600Hz, 3500Hz
 - 12dB attenuation
 - 80 watts RMS
 - 8 ohm
- Cat. CX-2619



\$32.95 ea

Velcro Tape

This tape is ideal for holding grilles on speaker cabinets. One side is glued or stapled to the box and the other to the grille. The grille then 'sticks' to the box. Comes as a pack of 2 rolls 300mm long.

Cat. CF-2763

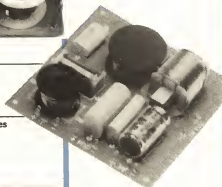
\$3.95



3 Way Type 5

- Crossover frequencies 500Hz, 3500Hz
 - 12dB attenuation
 - 200 watts RMS
 - 8 ohms
- Cat. CX-2621

\$69.50 ea



Innerbond

Innerbond is the ideal substance for lining the insides of speaker cabinets. It has excellent damping properties and is clean and non-irritating, unlike many substitutes. Use the best! Comes on a roll approx. 900mm wide. Thickness is 25mm.

Cat. AX-3690

\$5.95 per metre



Personal Shoppers

Don't forget to call in early in the month to buy your new copy of Silicon Chip and Electronics Australia. We generally have them available before they arrive in newsagents.

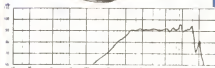
Cone Tweeter

Quality cone tweeter at a reasonable price. General size, to suit most applications including replacement.

Nom Impedance 8 ohms $\pm 15\%$
Max Power 75 watts system power
Freq. Range 3,000 to 16,000Hz
SPL 91.5dB ± 2 dB/W
Flux Density 7,200 Gauss
Magnet Size 45 x 45 x 22 x 8mm
Magnet Weight 47.4 grams (1.67 oz)
Net Weight 170 grams (6 oz)
Dim: A 85, B 85, C 70mm
Cat. CT-2000

\$9.95

10+ \$9.25 ea



IC-75 3" Tweeter

Black square metal frame polypropylene, dark grey cone. For those who want the best in a cone tweeter.

Impedance 8 ohms
Resonant Freq. 1000Hz
Freq. Response 1000 - 18,000Hz
Power Handling 80 watts RMS system
SPL 91dB
Size: A 128mm; B 136mm; C 120mm
Cat. CT-2005

\$12.95

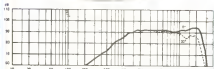


Foster Dome Tweeter

The D025N25 is a brilliant tweeter. It's probably the cleanest sounding tweeter we sell. It handles enormous amounts of power and has a very smooth response.

Power Handling 150 watts RMS system
Freq. Response 3,000 - 30,000Hz
Resonant Freq. 1,200Hz
Impedance 8 ohms
SPL 91dB/1 metre
Flux Density 13,500 Gauss
Weight 610 grams
Dim: A 120, B 108, C 96mm
Cat. CT-2018

\$36.50

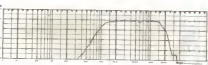


Minstrel 1" Dome Tweeter

As used in the Minstrel 2/30 speaker kit, ref. Silicon Chip February 1989. This tweeter offers excellent top end quality at a very reasonable price for a dome tweeter.

Power Handling 60W RMS system
Resonant Freq. 1000Hz
Freq. Response 1000 - 20kHz
Impedance 8 ohms
Sensitivity 96dB/W/0.5m
Cat. CT-2025

\$19.95

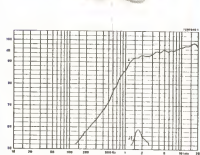


Philips Dome Tweeter AD11610/T8

Philips best tweeter. Exposed textile dome for superior transient response and incredibly wide dispersion.

SPECIFICATIONS
Magnet 240 gram
System Power 100 watts
Freq. Range 750 - 22kHz
Resonance 1250Hz
Voice Coil 25mm diameter
Dim: A 101, B 108, C 85mm
Cat. CT-2012

\$26.50



Vifa D19 Tweeter

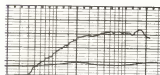
19mm dome tweeter with polymer diaphragm. Very smooth and versatile. Ferrofluid cooled voice coil ensures high power handling and perfect damping.

Suited for any quality 2, 3 and 4 way system with power handling up to 100 watts RMS.

SPECIFICATIONS
Nominal Impedance 8 ohms
Frequency Range 2.5 - 20kHz
Free Air Resonance 1700Hz
Sensitivity 89dB 1 watt @ 1 metre
Nominal Power 19mm
80 watts (for: 5000Hz, 12dB/oct)

8 ohms
2.5 - 20kHz
1700Hz
89dB 1 watt @ 1 metre
19mm
80 watts (for: 5000Hz, 12dB/oct)
8.2 ohms
0.2 grams
0.28 kg
Dim: A 97, C 75
B three holes only 72mm
Cat. CT-2019

\$55

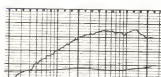
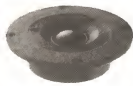


Vifa D25 Tweeter

25mm dome tweeter with polymer diaphragm. Larger and more powerful version of the DT19TD. Smooth and detailed performance with low colouration. Ferrofluid cooled voice coil makes this tweeter suited for high powered 2, 3 and 4 way systems up to 150 watts RMS.

SPECIFICATIONS
Nominal Impedance 8 ohms
Frequency Range 2 - 24kHz
Free Air Resonance 1500Hz
Operating Power 3.2 watts
Sensitivity 90dB 1 watt @ 1 metre
Nominal Power 25mm
Voice Coil Diameter 25mm
Air Gap Height 2mm
Voice Coil Resistance 4.7 ohms
Moving Mass 0.3 grams
Weight 0.53 kg
Dim: A 103, B 95, C 75mm
Cat. CT-2020

\$74



Dimensions of speakers:
A From one side to the other
B Mounting holes (diagonal)
C Cut out - in mm

Foster Horn Tweeter

This tweeter is brilliant. It is very bright with a crisp sound.
Power Handling 100 watts RMS system
Freq. Response 5,000 - 40,000Hz
SPL 96dB/1 metre
Impedance 8 ohm
Flux Density 11,500 Gauss
Net Weight 490 grams
Dim: A 97, B 85, C 65mm
Cat. CT-1016

\$38.95



Motorola KSN 1038 Piezo Tweeter

Over 100 watts rms, frequency 4 - 30kHz. No crossover required. Especially suited for Hi Fi.
Dim: A 100, B 85, C 70mm
Cat. CT-1914

\$23.95



Motorola KSN 1005A Piezo Tweeter

90mm SUPER HORN
 Perfect for use where long throw is needed. PA's and musical instrument use. Frequency response 3.8 - 28kHz ± 3 dB, maximum input 25V rms (100W amp power), no crossover required.
Dim: A 85, B 100, C 76mm
Cat. CT-1910

\$23.95



Economy Piezo Tweeter

At last, an economically priced quality piezo tweeter. Another manufacturers surplus stock purchase by Jeycor. These are in other catalogues for \$18.95!

SPECIFICATIONS
Freq. Response 3.5kHz - 40kHz
SPL 94dB/1W/1m
Intermittent 75 watts
 (Use with or without crossovers)
Size: A 79mm; B 75mm; C 65mm
Cat. CT-1905

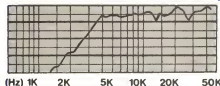
\$9.95



Motorola KSN 1025A Piezo Tweeter

50 x 150mm Rectangular
 Widest frequency range of the piezo horns. This speaker is ideally suited to P.A. use. No crossover required.
Cat. CT-1912

\$34.95



Midrange Speakers

JC-125 5" Polypropylene Midrange

This midrange has a grey polypropylene cone which matches the other JC range of speakers. It has a square black frame and is a totally sealed unit.
Impedance 8 ohm
Resonant Freq. 700Hz
Freq. Response 700 - 13kHz
Power Handling 80 watts RMS system
SPL 91dB
Size: A 90mm; B 95mm; C 78mm
Cat. CM-2081

\$19.95



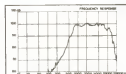
5" Polypropylene Cone Midrange

A quality midrange. Suitable for use with our Polycone woofers. Huge 10oz magnet. Black polycone, 5" diameter.

Power Handling 100W RMS system
Resonant Freq. 570Hz
Freq. Response 570 - 7kHz
Sensitivity 96dB
Size: A 130mm; B 120mm; C 110mm
Cat. CM-2085

\$24.95

1988 Price \$29.95



ALL SPEAKER MEASUREMENTS:

A From one side to the other
 B Mounting holes - diagonal
 C Cutout

White Cone Midrange

Back once again. Its been absent from our midrange line up for many months due to supply problems. We've resourced the product, put a larger 10oz magnet in it and it sounds great. Large sealed back with a foam surround.

Power Handling 80W RMS system
Freq. Response 310Hz - 7kHz
Resonant Freq. 310Hz
Sensitivity 95dB
Size: A 135mm; B 120mm; C 105mm
Cat. CM-2080



\$22.50



Cone Midrange

A quality 5" sealed back midrange with large magnet. Made in New Zealand, this speaker is excellent value for the price. Another Jaycar surplus stock buy.

Power Handling 100 watts RMS system
Freq. Response 350 - 7.5kHz
Resonant Freq. 400Hz
Sensitivity 90dB/1W/1m
Impedance 8 ohms
Size: A 130mm; B 120mm; C 112mm
Cat. CM-2078

\$19.95



Polyswitches

LOW COST SPEAKER PROTECTION

REF: EA JULY 1986

The very latest in speaker protection. Polyswitch protectors are based on conductive polymers and act like resettable solid state circuit breakers. When the operating current of the protector is exceeded the interior of the device partially melts, which suddenly increases the volume which increases the resistance drastically. This in turn reduces the current. The device stays in this state while the current is maintained because its temperature is elevated. Once the current is removed, the device re-establishes itself almost immediately, so that the low resistance value is restored. Three of these devices are available from Jaycar. Simply connect them in series with the speakers you wish to protect.

RN3410 is suitable for protection of tweeters in systems up to 100 watts. It's rated at 50 volt and 0.5 amp. Nominal resistance is 0.4 ohms.
Cat. RN-3410

\$6.95 ea 10+ \$6.65 each

RN3415 will protect midrange and woofers up to 100 watts. Rated at 50 volts and 1.15 amps. Nominal resistance is 0.12 ohms.
Cat. RN-3415

\$6.95 ea 10+ \$6.65 each

RN3418 is rated at 50 volts at 2.45 amps. Nominal resistance is 0.039 ohms. As used in 100 watt amplifier module Cat. KC-5019 from Silicon Chip Dec. 1987
Cat. RN-3418

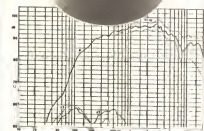
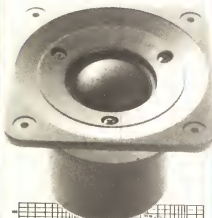
\$8.95 ea 10+ \$8.50 each

Philips Dome Midrange AD02110/Sq8

This great dome midrange was used in the ETI 4000 speaker kits. It offers an excellent flat frequency response and it sounds great.

Freq. Response 550 - 5kHz
Resonant Freq. 360Hz
Power Handling 100 watts RMS (system)
Flux Density 0.9 T
Loudspeaker Mass 1kg
Textile dome and an acoustically sealed pot.
Dim: A 133, B 160, C 134mm
Cat. CM-2088

\$72.50



Dimension of speakers:

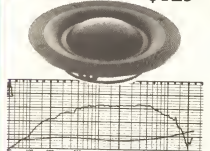
A from one side to the other
B Mounting holes (diagonal)
C Cut out - in mm

Vifa D75 Dome Midrange

Unusual 3" dome midrange with coated soft textile diaphragm. Very smooth and detailed performance with excellent dispersion and clarity. 75mm voice coil ensures high power handling and superb transient response. Requires a 1.5 litre sealed and damped enclosure. Optimal midrange in 3 and 4 way systems with a power handling up to 150 watts rms.

Nominal Impedance 8 ohms
Frequency Range 350 - 5kHz
Free Air Resonance 300Hz
Sensitivity 91dB 1 watt @ 1 metre
Nominal Power 80 watts (to 500Hz 12dB/oct)
Voice Coil Diameter 75mm
Voice Coil Resistance 7.2 ohms
Moving Mass (incl. air) 3.6 grams
Weight 0.65 kg
Dim: A 150, B 133, C 112mm
Cat. CM-2086

\$129



Horn Midrange

These all metal horn speakers will add life to your disco sound system or band speakers. Use one of the piezo tweeters for the top end and truly great sound.

Rated at 30 watts rms, in a system they will handle over 100 watts rms.

TWO CONVENIENT SIZES

4" x 10 1/2"

Impedance 8 ohms
Rating 30 watts rms
Response 1.5kHz - 14kHz
Dimensions 102 x 268 x 192mm
Cat. CM-2082

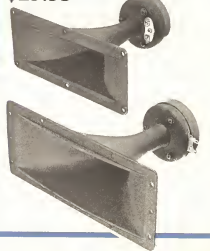
\$44.50



3" x 7"

Impedance 8 ohms
Rating 30 watts rms
Response 2kHz - 15kHz
Dimensions 183 x 75 x 163mm
Dim: A 175 x 75, B 65, C 150 x 52mm
Cat. CM-2084

\$29.95



5" Woofer/ Midrange

Another new speaker for our 1989 line-up. High quality New Zealand made with a large magnet. Open backed, so if used as a midrange it will have to be enclosed on its own.

Power Handling 20 watts RMS
Resonant Freq. 80Hz
Freq. Response 80 - 15kHz
Sensitivity 90dB
Size: A 128mm; B 120mm; C 110mm
Cat. CW-2104



6" Woofer - Polypropylene

This driver incorporates a huge 10oz magnet. Cone is white polypropylene which will handle the bass without distortion. Suggested boxes: sealed enclosure 30 litres, in room response flat down to 50Hz, reasonable. Or 20 litres, in room response flat down to 60Hz. Both have controlled roll-off below that down to 30-35Hz. All considered a very good driver.

Power Handling 30W rms
Impedance (400Hz) 8 ohm
Freq. Response 40.8 - 3000Hz
Resonant Freq. 40.8Hz
FS 62.4
CR 627
Qs .805
Qm 2.846
VAS 14.4L approx
DC Resistance 7
Series Resistance 0
Z Max 31.8 ohms
R (High) 86Hz
L (Low) 40.8Hz
Sealed Box
VB 30 litres
FC 73.5Hz
F3 68.5Hz
QC .763
Alpha .479
Dim: A 165, B 157, C 144mm
Cat. CW-2108



Lower
Price
\$29.50



8" White Cone Woofer

Best looking and sounding 8" woofer we've seen for the price. White cone, large magnet 10oz, roll surround.

Power Handling 30 watts rms
Resonant Freq. 45Hz
Freq. Response 45 - 5000Hz
Impedance 8 ohm
Sensitivity 96dB
Dim: A 211, B 200, C 185mm
Cat. CW-2111



\$19.95



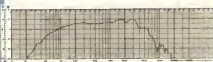
8" Minstrel Woofer

Ref: Silicon Chip February 1989

As used in our Minstrel 2/30 speaker kit. It incorporates a non press paper cone with butyl edge. This speaker was selected by Silicon Chip because of its excellent sound characteristics and power handling.

Power Handling 40 watts RMS
40 watts RMS in Minstrel kit with air cored chokes
Resonant Freq. 45Hz
Freq. Response 45 - 4,000Hz
Impedance 8 ohm
Sensitivity 95dB/1W/0.5m
Cat. CW-2113

\$26.95



Magnavox 8W Woofer

The 8W Mk 6 is a high fidelity woofer utilising a 25mm diameter long throw voice coil wound on an aluminium former and a high compliance suspension with a polyurethane foam roll surround, resulting in excellent linearity at high power.

Power Handling 65 watts rms
Resonant Freq. 43Hz
Freq. range 40 - 5kHz
Sensitivity 96dB
Voice Coil Dia. 25mm
Magnet Weight 350 grams
Qms 2.19
Qes 0.66
Qts 0.51
Vas 63L
Dim: A 205, B 195, C 183mm.
Cat. CW-2109

\$39.50



8" Polypropylene

A quality 8" woofer with polypropylene white cone. Huge 17.7oz magnet will handle those heavy bass notes with ease. Exceptionally smooth response with very low distortion due to PP cone. Suggested box: sealed enclosure, 40 litres. In room response flat down to 40Hz, very good.

Power handling 60 watts rms system
Impedance 8 ohms
Resonant Freq. 40Hz
Sensitivity 88dB 1 metre 1 watt
Effective Freq. 40 - 4000Hz
FS 55.6
CR .787
Qs 1.028
Qm 3.357
VAS 19.3L approx
DC Resistance 6.8
Series Resistance 0
Z Max 29 ohms
R (High) 74.7Hz
L (Low) 40.5Hz
Sealed Box
VB 40 litres
FC 67.7Hz
F3 64.3Hz
QC .958
Alpha .482

Lower
Price

Dim: A 240, B 220, C 160mm
Cat. CW-2114

\$39.95



JC-150 6" Woofer

The JC-150 is a quality Australian made 6" woofer. It incorporates a grey polypropylene cone and a square black frame. Suitable for a two or 3 way system and matches our JC tweeter and midrange.

Impedance 8 ohm
Resonant Freq. 45Hz
SPL 95dB/1W/0.5m
Power Handling 50 watts RMS
Freq. Response 80 - 6kHz
Qms 1.73
Qes 0.52
Qts 0.4
Vas 22.2
Vented Enclosure
Volume 20 litre
Fb 52Hz
F3 53Hz
Vent Length 69mm
Vent diameter 50mm
Size: A 177mm; B 184mm; C 141mm
Cat. CW-2105



\$42.95

IC-200 8" Woofer

The IC-200 is a quality Australian made 8" woofer. It has a grey Polypropylene cone and a black square frame. Matches perfectly with the JC tweeter and JC midrange

Impedance	8 ohm
Resonant Freq.	39Hz
SPL	95dB/1W/0.5m
Power Handling	65 watts RMS
Freq. Response	50 - 5,500Hz
Qms	1.89
Qes	0.64
Qto	0.48
Vas	59.8
Sealed enclosure	
Volume	45 litre
f3	63Hz
fc	53Hz

Size: A 218mm; B 229mm; C 185mm
Cat. CW-2112

\$49.95



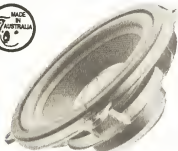
Magnavox 8MV 8/30 Replacement

If you own a pair of 8/30 woofers, you can now easily update them. Your old 8/30's handle 30 watts rms, the new 8MV's handle 120 watts rms. No need to buy new cabinets. 8MV's mounts in the same hole, otherwise it's a high quality, high power 8" woofer for most applications.

Power Handling	120 watts rms
Resonant Freq.	31Hz
Freq. Range	50 - 4kHz
Sensitivity	95dB
Voice Coil Dia.	38mm
Magnet Weight	510 grams
Qms	1.73
Qes	0.47
Qto	0.37
Vas	80L

Dim: A 220, B 225, C 210mm
Cat. CW-2110

\$99.50 ea



Dimensions of speakers:
A from one side to the other
B Mounting holes (diagonal)
C Cut out - in mm

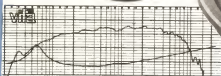
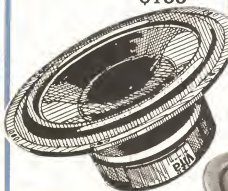
Vifa P21 8" Woofer

8" Polycone woofer with large magnet and diecast magnesium basket for highest rigidity. Can be used in 25 - 45 litre bass reflex enclosures. Ideal in both 2 and 3 way systems. 70 watts power handling capacity.

Nominal Impedance	8 ohms
Freq. Range	26 - 4kHz
Free Air Resonance	33Hz
Operating Power	2.5 watts
Sensitivity	92dB/1 watt @ 1 metre
Nominal Power	60 watts
Voice Coil Diameter	40mm
Voice Coil Resistance	5.8 ohms
Moving Mass	20 grams
Thiele/Small	Qe: 0.41
Parameters	Ql: 0.35
	Vas: 80.1
	1.65 kg

Weight
Dim: A 215, B 207, C 182mm
Cat. CW-2132

\$188



Philips 8" Woofer AD80652/W8

Ideal for small sealed enclosures. Maximum enclosure volume is 25 litres. Great bass. Recommended crossover frequency 2,500Hz.

Freq. Response	50 - 4kHz
Resonant Freq.	39Hz
Power Handling	50 watts rms
Flux Density	1.2T
Total Moving Mass	17.5 g
Compliance	
- Spkr. Unmounted	1.02mm/W
Voice Coil Height	10mm
Cone Diameter	25mm
Magnet Mass	450 grams
Mass of Speaker	1.15kg
Paper cone and polyester surround	
Dim: A 205, B 195, C 185mm	
Cat. CW-2115	

\$49.50



10" Polypropylene

The CW-2116 is a quality white cone polypropylene woofer with a large 20oz. magnet. Suggested boxes: vented 60 litre tuned to 28Hz, 70mm round port. 185mm long (in room response flat down to 25Hz, quite fantastic considering the box size) Alternately it can be used in a smaller sealed box, 45 litres (in room response flat down to 35Hz.)

Power Handling	70 watts rms system
Impedance	8 ohms
Freq. Response	28 - 4kHz
Effective Freq.	30Hz - 4,000Hz
FS	44.3
Ql	4.91
Qe	.548
Qm	4.722
VAS	58.4L approx
DC Resistance	6.9
Z Max	66.4 ohms
R (High)	60.4Hz
L (Low)	31.3Hz
Vented Box, Bessel	
VB	62.8 litres
FB	28Hz



Round Vent	Diameter 70mm Length 183mm
Sealed Box	
VB	45 litres
FC	67.2Hz
F3	64Hz
QC	.744
Alpha	1.298
Dim: A 263, B 243, C 233mm	
Cat. CW-2116	

Lower
Price

\$52.50



JC-250 10" Woofer

The JC-250 is the largest woofer in the JC range. It incorporates a black square frame with a grey polypropylene cone. It requires a sealed enclosure of 70 litres. It suits our matching JC midrange and tweeter.

Impedance	8 ohm
Resonant Freq.	28Hz
SPL	97dB/1 watt/0.5m
Power Handling	75 watts RMS
Freq. Response	45 - 4500Hz
Qms	3.54
Qes	0.85
Qto	0.68
Vas	170
Size: A 275mm; B 279mm; C 226mm	
Cat. CW-2120	

\$64.95



Magnavox 10W

The 10W is a 10" high quality, high power, medium priced speaker which is made in Australia. 25mm voice coil wound on aluminium former. Polyurethane foam roll surround.

Power Handling	75 watts RMS
Freq. Response	33Hz - 5,000Hz
Resonant Freq.	33Hz
Magnet Weight	350 grams
Sensitivity	95dB
Oms	2.9
Qes	0.841
Qto	0.85
Vas	156L
Size: A 255mm; B 245mm; C 227mm	
Cat. CW-2118	

\$43.50



Vifa 10" Woofer

This 10" Polycone woofer is the largest in the Polycone range. Large magnet, diecast magnesium basket and rubber surround. Designed for 3 way bass reflex systems with a volume of 50 - 100 litres. 75 watts power handling capacity.

Nominal Impedance	8 ohms
Freq. Range	25 - 3kHz
Free Air Resonance	25Hz
Operating Power	5 watts
Sensitivity	89dB 1 watt @ 1 metre
Nominal Power	60 watts
Muscle Power	100 watts
Voice Coil Diameter	40mm
Voice Coil Resistance	5.7 ohms
Moving Mass (incl. air)	44 grams
Thiele/Small	Qm: 3.15
Parameters	Qe: 0.48
	Qr: 0.40
	Vas: 180L
	1.95 kg

Weight Dim: A 258, B 252, C 228mm
Cat. CW-2118

\$220



Magnavox 12W

12" woofer, medium power, low cost, high quality. 25mm voice coil wound on aluminium former. Polyurethane foam roll surround.

Power Handling	80 watts RMS
Freq. Response	30 - 5,000Hz
Resonant Freq.	30Hz
Magnet Weight	350 grams
Sensitivity	96dB
Oms	3.76
Qes	1.23
Qto	0.83
Vas	263L
Size: A 304mm; B 296mm; C 281mm	
Cat. CW-2122	

\$59.95



Magnavox 12MV

The 12MV is a high power high fidelity woofer utilising a 38mm diameter long throw voice coil wound on an aluminium former and high compliance suspension with a polyurethane foam roll surround, resulting in excellent linearity at very high input powers.

Power Handling	150 watts rms
Resonant Freq.	19Hz
Freq. Range	fo - 3kHz
Sensitivity	96dB
Voice Coil Dia.	38mm
Magnet Weight	510 grams
Oms	3.76
Qes	0.56
Qto	0.49
Vas	560L
Dim: A 340, B 323, C 280mm	
Cat. CW-2125	

\$119.50



12" Woofer Polypropylene

This driver has a white PP cone on a black frame and a huge 300g magnet. Suggested box: sealed enclosure, 60 to 100 litres. The smaller (60L) box's in room response flat down to 35Hz, quite reasonable. 100 litre box would be 'optimally flat' (Ct = .707) in room response down to 30Hz, with only 12dB/octave roll-off, excellent. A good driver, despite the fact it is not ideal in a vented enclosure. Its sealed box performance is very good though.

Power Handling	80 watts rms system
Impedance	8 ohms
Resonant Freq.	19.2Hz
Sensitivity	92dB 1 watt 1 metre
Effective Freq. Res.	19 - 4,000Hz
Peak Cone Excursion	2.5
FS	33
Qr	.473
Qm	.601
Qes	2.233
VAS	170.4L approx
DC Resistance	6.9
Series Resistance	0
Z Max	22.6 ohms
R (High)	51.4Hz
L (Low)	19.3Hz
Sealed Box	
VB	60 litres
FC	64.7Hz
F3	62.8Hz
QC	.927
Alpha	2.84

Dim: A 310, B 293, C 276mm
Cat. CW-2130



Lower Price

\$69.95

15" Woofer 120 Watt RMS Polypropylene

The largest diameter speaker we stock. We have now direct imported this speaker and we can reduce the price down from \$189 to a very reasonable \$119.50 - SAVE \$69.50 on 1988 price. Two suggested boxes: vented 150 litre tuned to 25Hz. 100mm round port, 150mm long (in room response flat down to 25Hz). Or a sealed box 90 litres which would be 'optimally flat' as per Thiele-Small theory i.e. Ct = .707 (in room response flat down to 35Hz, but cut-off below that is only 12dB/octave, excellent).

Power Handling	120 watts RMS
Resonant Freq.	18.3Hz
Impedance	8 ohm
Freq. Response	18 - 2,000Hz
FS	28.6
Qr	.336
Qm	.368
Qes	3.891
VAS	300.8L approx
DC Resistance	7.1
Series Resistance	0
Z Max	82.1 ohms
R (High)	43.3Hz
L (Low)	18.3Hz
Vented Box, Bessel	
VB	152 litres
FB	26.4Hz
Round Vent	100mm diameter
	150mm length
Sealed Box	
VB	90 litres
FC	59.6Hz
F3	60.1Hz
QC	.701
Alpha	3.342
Dim: A 384, B 375, C 354mm	
Cat. CW-2131	



Lower Price

\$119.50



Etone 10" Subwoofer

As used in the Electronics Australia subwoofer system.

Size	10" (250mm)
Cat Frame	QT = 0.39, VAS = 631
Power Handling	100 watts rms
Free Air Resonance	32Hz ± 1Hz
Voice Coil Dia.	2"
Magnet	3 kg (6.6 lb)
Dim: A 268, B 250, C 238mm	
Cat. CW-2119	

\$129.50



Minstrel 2-30 Speaker Kit

Ref: Silicon Chip February 1989

This fabulous speaker kit is the result of a co-operative project between Jaycar and Silicon Chip. Jaycar found the drivers overseas and Silicon Chip designed the kit and crossovers to produce an excellent, economical bookshelf type speaker kit.

Leo Simpson (Editor of Silicon Chip) sums up the Minstrel 2-30 kit:

"The overall balance between bass and treble is very good and the bass response will be more than adequate for most peoples tastes. The treble is smooth and extended without any tendency to 'split' as sometimes happens when inferior tweeters are used. Power handling is good too, and the kit will comfortably handle the full power output of stereo amplifiers rated up to 50 or 60 watts per channel on normal program material. Combine that with the efficiency (95dB at 1 watt at 0.5 metre) and a pair of Minstrel 2-30's have the capacity to produce lots of good quality sound in average to large listening rooms."

Drivers incorporated in the system include an 8" woofer (Cat. CW-2113) and a dome tweeter (Cat. CT-2025). Crossover is pre-built on a circuit board and incorporates two large air cored chokes, three capacitors and 3 - 5 watt resistors.

Cabinets are black simulated wood grain (similar to Vifa cabinets) and are supplied in a flat pack wrap around style which only need to be glued together. Baffle is pre-cut and speaker cloth, innerboard, rear terminals are all supplied. Cabinet size is 490(H) x 303(W) x 290(D)mm.

Demonstration speakers are working at all our stores except Concord. Feel free to drop in for an audition anytime. In a few months the second in the Minstrel range will be released, a 10" 3-way system. Watch our monthly ads for information.

Speakers and Crossovers (pair)

Cat. CS-2540 **\$149**

cabinets (pair)

Cat. CS-2542 **\$129**

**PURCHASE SPEAKERS
AND CABINETS
TOGETHER FOR ONLY
\$269**



Vifa Speaker Kits

We all know how fantastic the VIFA speaker system SA-series speaker units sound. It would not be an exaggeration to say that they generally perform as well as built equivalents that cost twice as much! Despite this, Jaycar is constantly trying to further reduce prices for the customers' benefit. We are now proud to announce MASSIVE PRICE REDUCTIONS on the entire range of VIFA SA-series Hi-Fi speaker kits. Check out our savings but be quick these prices can only last whilst the Australian dollar is strong.

Vifa SA-50 2-Way Kit

The latest loudspeaker technology has been applied in these new small hi-fi speakers. No longer are big, unattractive boxes the size of refrigerators necessary to fill your lounge with sound. The powerful SA-50 can on their own reproduce all kinds of music with the highest fidelity. A new specially-developed 5" woofer/midrange from Vifa has been computer optimised for use in a 5-litre bass reflex cabinet, which matches well with the D19 dome tweeter.

The SA-50 has its bass reflex port mounted at the rear, which makes this speaker ideal for bookshelf mounting. A distance of 5-10cm from the wall will provide the optimal bass performance. The compact size of these speakers will make it possible for them to be integrated with any decor, without 'cluttering up' the room. One of the many benefits of small speakers is their stereo imaging. Due to the small surface of the front baffles, reflections are very limited, resulting in better stereo picture than can be achieved from larger speakers. Cabinet size is 210(D) x 170(W) x 260(H)mm small enough for any bookshelf.

System	2-way bass reflex
Woofer	125mm (5")
Tweeter	19mm dome ferro fluid
Rated Power	50 watt peak
IEC Power	30 watts RMS
Sensitivity (1W/1m)	87dB
Frequency Response	60 - 20,000Hz
Crossover Frequency	3500Hz
Tuning Frequency	68Hz
Impedance	8 ohms
Internal Volume	5.3 litres
Dimensions	260(H) x 170(W) x 210(D)mm
Weight	4 kgs



Vifa SA-70 2-Way Kit

If your budget won't run to the \$800-\$1,000 for an equivalent pair of fully-imported loudspeakers, these speakers are the ones to go for. The new SA-70 is an improved version of the original EA-60/60 speaker kit released in 1987 by 'Electronics Australia' magazine.

2,500 of these speakers have been built since their release, and they have become one of the most popular bookshelf speakers in Australia. Everybody can build these speakers - no carpentry skills or electronics certificate is needed.

Some extracts from 'Electronics Australia': 'The tweeters are exotic little beasts' (Editor, EA magazine). It is the 81-mm popular 19mm soft dome tweeter with ferro fluid damped voice coil and very smooth frequency response.

The woofers are a new improved 8" sandwich-coated woofer with foam surround, with a very mechanically-rigid basket.

A new crossover design extracts all the performance out of these exotic Danish loudspeaker drivers. The power handling is increased to 70 watts RMS per channel, and in an average size lounge room, driven by a 20-80 watt amplifier, these speakers will reproduce all kinds of music with the highest fidelity.

The construction of the speakers follows the usual principle of the knock-down flat-pack cabinets, pre-built crossovers and push-on tags for the leads. A real winner! Cabinet size is 250(D) x 260(W) x 490(H)mm.

System	2-way sealed
Woofer	194mm (8")
Tweeter	19mm dome ferro fluid
Rated Power	70 watt peak
IEC Power	50 watt RMS
Sensitivity (1W/1m)	89dB
Frequency Response	50 - 20,000Hz
Crossover Frequency	2800Hz
System Resonance	78Hz
Impedance	8 ohms
Internal Volume	21 litres
Dimensions	490(H) x 260(W) x 235(D)mm
Weight	8 kgs



Speakers & Crossovers

Cat. CS-2450

\$299 (was \$319)

Cabinets

Cat. CS-2452

\$80.00

TOTAL \$379 PAIR

BUY BOTH TOGETHER FOR \$369

SAVE \$30 OVER 1988 PRICE

Speakers & Crossovers

Cat. CS-2471

\$349 (Save \$30)

Cabinets

Cat. CS-2472

\$120

TOTAL \$469 PAIR

BUY BOTH TOGETHER FOR \$449

SAVE \$50 OVER 1988 PRICE

Vifa SA-100 2-Way Kit

This exciting new high-performance speaker kit uses Vifa drivers from Denmark. It is an improved version of the original David Tilbrook design AEM-6102 speaker kit. A new advanced crossover design with asymmetrical crossover slopes and impedance correction circuit gives these speakers an unequalled performance compared to any fully-imported loudspeaker system under \$2,000 a pair.

Well over 1800 of the original AEM-6102 speaker systems have now been built in Australia with superb results. With a saving well in excess of \$1,000 compared to any fully-imported loudspeaker system, it is now your amplifier and the rest of your ancillary equipment that sets the limit for your enjoyment of your hi fi system.

The speaker kit consists of the famous 8" polycarbonate woofer with diecast chassis and rubber roll surround. The tweeters are the legendary D25 with ferro fluid cooling and polymer diaphragms. The cabinet is supplied in knock-down form, veneered in beautiful black woodgrain finish with silver front baffles, speaker cloth, damping material, grill clips, speaker terminals, screws and ports.

The performance of these speakers is outstanding. "Australian Hi-Fi" magazine recently acclaimed: "Well, Mr. Tilbrook and Scan have certainly done their homework. The AEM-6102 is simply superb. A very accurate design and exhibits remarkably low levels of colouration and distortion - across the board".
Cabinet size is 338(D) x 290(W) x 680(H)mm

System	2-way bass reflex
Woofer	197mm (8")
Tweeter	25mm dome ferro fluid
Rated Power	100 watt peak
IEC Power	70 watt RMS
Sensitivity (1W/1m)	91dB
Frequency Response	35 - 20,000Hz
Crossover Frequency	2200Hz
Tuning Frequency	48Hz
Impedance	8 ohms
Internal Volume	42 litres
Dimensions	67(H) x 29(W) x 29.5(D)cm
Weight	15 kgs

Speakers & Crossovers

Cat. CS-2460

\$549 (was \$629)

Cabinets

Cat. CS-2462

\$170

TOTAL \$719 PAIR

BUY BOTH FOR \$699

SAVE \$100 OVER 1988 PRICE



Vifa SA-130 3-Way Kit

In the past buying high quality loudspeakers has necessitated selecting a fully-imported product. With the drastic devaluation of the Australian dollar these imported products have become beyond the reach of most hi fi and electronic enthusiasts.

With the introduction of Vifa speakers in kit form 3 years ago, it has been proven that you can now build the same quality loudspeakers as the expensive imported models (which might very well be using Vifa drivers anyway). The large floor-standing top model AEM-6103, originally designed by David Tilbrook, has since been improved, and is now available in a new slimmer cabinet, with improved drivers and the latest European crossover technology. With a dispersion pattern linear up to 170° these new SA-130 speakers are to be ranked among the finest imported speakers in the \$2,500 - \$3,000 bracket.

The tight deep bass is produced by the powerful 10" polycarbonate P25W0, which has diecast magnesium surround, aluminium voicecoil former and rubber roll surround. The new improved 3" dome midrange D75MX takes care of the critical midrange area, giving these speakers an most accurate and neutral performance, especially noticeable on human voices which are reproduced with the highest fidelity.

A classic among dome tweeters is the brilliant 19mm ferro fluid cooled D19TD. Have a close look at all the imported English and European loudspeakers and you will find this little star in almost 50% of them. Not without reason! Its polymer diaphragm provides extremely clear and well balanced treble.

The new Vifa SA-130 top model is available in kit form only, either with or without flat pack cabinets veneered in beautiful black woodgrain finish with silver front baffle.

Cabinet size 368(D) x 300(W) x 940(H)mm

System	3-way bass reflex
Woofer	245mm (10")
Midrange	75mm textile dome
Tweeter	19mm dome ferro fluid
Rated Power	130 watt peak
IEC Power	90 watt RMS
Sensitivity (1W/1m)	90dB
Frequency Response	28 - 20,000Hz
Crossover Frequencies	800/3000Hz
Tuning Frequency	35Hz
Impedance	8 ohms
Internal Volume	60 litres
Dimensions	94(H) x 30(W) x 29.5(D)cm
Weight	24 kgs

Speakers & Crossovers

Cat. CS-2465

\$779 (was \$929)

Cabinets

Cat. CS-2467

\$250 (was \$270)

TOTAL \$1029 PAIR

BUY BOTH TOGETHER FOR \$999

SAVE \$200 OVER 1988 PRICE



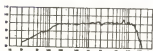
Foster 4" Widerange C100K03

This very popular widerange/midrange is ideal where high quality is needed, but where space is at a premium.

SPECIFICATIONS

Impedance	8 ohms
Power	3 watts
Max Power	10 watts
Resonant Freq.	90 ±15Hz
Freq. Range	fo - 17kHz/W
SPL	90 ±2dB/W
Flux Density	10,000 Gauss
Dim: A 126, B 115, C 102mm.	
Cat. CE-2312	

\$24.50



4" Polypropylene Widerange/Midrange

A new addition to our range of polycone speakers. Suited as a widerange or a midrange in a 3 way system in its own sub enclosure of 3 litres. Crossover suggestions about 400-500Hz and 3 to 5kHz.

FS	120.2
Qt	.775
Qe	.948
Qm	4.241
VAS	2.4L approx
DC Resistance	7.5
Series Resistance	0
Z Max	41 ohms
R (High)	158.7Hz
L (Low)	90.4Hz
Sealed Box	
VB	3 litres
FC	161.3Hz
F3	124.7Hz
QC	1.04
Alpha	.802

Cat. CE-2314

\$13.95

10+ \$13.50 ea



6" Twincone Widerange

Good quality 6" dual cone speaker for replacements on small boxes. Foam surround with black cone and rubber mounting seal.

Freq. Resp.	60 - 15kHz
Sensitivity	89dB/tmt
Impedance	8 ohms
Power	10 watts rms
Magnet Weight	5.3 oz
Dim: A 166, B 157, C 145mm	
Cat. CE-2320	

\$18.95

10+ \$17.95 ea



8" Twincone 4 Ohm P.A.

Ideal for multispeaker sound reinforcement where 4 ohm speakers are required. Quality speaker made in New Zealand. Limited Quantity.

10 watt power handling	
Frequency range	60 - 15kHz
Size: A 210mm; B 200mm; C 180mm	
Cat. CE-2322	

\$9.95

10+ \$9.50 ea



8" Twincone 4 Ohm 20 Watt

Another surplus stock purchase. Your chance to save a bundle on quality New Zealand made 8" twincone 20 watt. Series two together for 8 ohms and use for rumpus room speakers, ceiling speakers - even car speakers.

20 watt power handling, frequency range	50 - 15kHz, large magnet, aluminium dust cover.
Size: A 210mm; B 195mm; C 185mm	
Cat. CE-2323	

\$14.95

10+ \$13.95



ALL SPEAKERS ARE 8 OHM UNLESS OTHERWISE STATED.

8" Twincone 8 Ohm P.A.

This speaker has high efficiency and is ideal for extension speaker and low level sound reinforcement use. The heavy magnet and dual cone results in a wide frequency response. Power handling 10 watts, 200mm diameter.

frequency range	60 - 18kHz
Dim: A 205, B 197, C 187mm	
Cat. CE-2325	

\$13.95

10 or more
\$13.50 each



Magnavox 8JX

The 8JX is a 8" twin cone speaker suitable for medium power handling applications.

SPECIFICATIONS

Power Handling	40 watts RMS
Resonant Freq.	44Hz
Freq. Range	fo - 12kHz
Sensitivity	93dB
Voice Coil Dia.	25mm
Magnet Weight	190g
Dim: A 210, B 200, C 190mm.	
Cat. CE-2333	

\$34.95



Magnavox 8WR

The 8WR is a high fidelity wide range 8" driver utilising a 25mm diameter long throw voice coil wound on an aluminium former and a high compliance suspension with a polyurethane foam roll surround. An auxiliary cone has been fitted to extend the high frequency response by over 1 octave.

SPECIFICATIONS

Power Handling	65 watts RMS
Resonant Freq.	43Hz
Freq. Range	fo - 12kHz
Sensitivity	96dB
Voice Coil Dia.	25mm
Magnet Weight	350 grams
Dms	2.19
Qea	0.68
Qto	0.51
Vaa	63.61
Dim: A 210, B 200, C 190mm	
Cat. CE-2338	

\$37.95



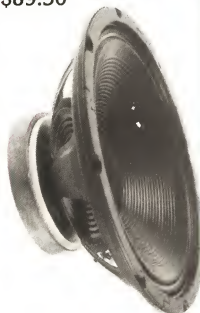
12" Guitar Speaker

Finally available, our updated guitar speaker with extended frequency response. Especially suited for not only Bass guitar but Rhythm and

Lead as well.
Resonant Freq. 60Hz
Impedance 8 ohm
Freq. Response 60 - 5,000Hz
Power Handling 100 watts RMS
Magnet Weight 40oz
Net Weight 3610g
Sensitivity 102dB
Cat. CG-2380



\$89.50



5" Widerange Speaker Bargains

5 WATT

These 5 watt 8 ohm speakers are quality made in New Zealand. Limited quantity.

Cat. AS-3020

Normally \$8.95

ONLY \$4.95

10+ \$4.65 ea



10 WATT

We have a small quantity of 10 watt 8 ohm speakers also.

Cat. AS-3022

\$9.95

10+ \$9.50 ea



7 x 5" CAR SPEAKER GRILLE

Metal, black in colour

Cat. AS-3035

\$3.95

SAVE \$4



Frequency Specifications for Polycone Speakers



4" Cat. CE-2314

F = 10	-48.29dB
F = 11.23	-46.27dB
F = 12.61	-44.25dB
F = 14.15	-42.24dB
F = 15.88	-40.23dB
F = 17.83	-38.21dB
F = 20.01	-36.19dB
F = 22.46	-34.16dB
F = 25.21	-32.13dB
F = 28.30	-30.10dB
F = 31.77	-28.05dB
F = 35.66	-26.00dB
F = 40.03	-23.93dB
F = 44.93	-21.86dB
F = 50.43	-19.77dB
F = 56.61	-17.65dB
F = 63.54	-15.52dB
F = 71.32	-13.36dB
F = 80.06	-11.18dB
F = 89.87	-8.99dB
F = 100.88	-6.84dB
F = 113.24	-4.68dB
F = 127.11	-2.74dB
F = 142.68	-1dB
F = 160.16	0.28dB
F = 179.78	1.07dB
F = 201.8	1.42dB
F = 226.52	1.48dB
F = 254.27	1.37dB
F = 285.42	1.2dB

1/6th Octave sampling above

8" Cat. CW-2114

F = 10	-33.13dB
F = 11.23	-31.10dB
F = 12.61	-29.06dB
F = 14.15	-27.02dB
F = 15.88	-24.96dB
F = 17.83	-22.91dB
F = 20.01	-20.84dB
F = 22.46	-18.76dB
F = 25.21	-16.66dB
F = 28.3	-14.55dB
F = 31.77	-12.42dB
F = 35.66	-10.29dB
F = 40.03	-8.17dB
F = 44.93	-6.11dB
F = 50.43	-4.16dB
F = 56.61	-2.41dB
F = 63.54	-0.98dB
F = 71.32	0.04dB
F = 80.06	0.66dB
F = 89.87	0.94dB
F = 100.88	1.01dB
F = 113.24	0.96dB
F = 127.11	0.85dB
F = 142.68	0.73dB
F = 160.16	0.61dB
F = 179.78	0.54dB
F = 201.8	0.41dB
F = 226.52	0.33dB
F = 254.27	0.27dB
F = 285.42	0.21dB

1/6th Octave Sampling above

12" Cat. CW-2130

F = 10	-32.34dB
F = 11.23	-30.34dB
F = 12.61	-28.26dB
F = 14.15	-26.23dB
F = 15.88	-24.18dB
F = 17.83	-22.12dB
F = 20.01	-20.06dB
F = 22.46	-17.98dB
F = 25.21	-15.89dB
F = 28.3	-13.78dB
F = 31.77	-11.67dB
F = 35.66	-9.57dB
F = 40.03	-7.5dB
F = 44.93	-5.51dB
F = 50.43	-3.67dB
F = 56.61	-2.07dB
F = 63.54	-0.81dB
F = 71.32	0.05dB
F = 80.06	0.56dB
F = 89.87	0.79dB
F = 100.88	0.84dB
F = 113.24	0.79dB
F = 127.11	0.74dB
F = 142.68	0.6dB
F = 160.16	0.51dB
F = 179.78	0.42dB
F = 201.8	0.34dB
F = 226.52	0.28dB
F = 254.27	0.22dB
F = 285.42	0.18dB

1/6th Octave Sampling above

6" Cat. CW-2108

F = 10	-34.62dB
F = 11.23	-32.60dB
F = 12.61	-30.58dB
F = 14.15	-28.57dB
F = 15.88	-26.56dB
F = 17.83	-24.54dB
F = 20.01	-22.52dB
F = 22.46	-20.51dB
F = 25.21	-18.49dB
F = 28.3	-16.48dB
F = 31.77	-14.48dB
F = 35.66	-12.51dB
F = 40.03	-10.56dB
F = 44.93	-8.69dB
F = 50.43	-6.9dB
F = 56.61	-5.26dB
F = 63.54	-3.82dB
F = 71.32	-2.61dB
F = 80.06	-1.68dB
F = 89.87	-1dB
F = 100.88	-0.54dB
F = 113.24	-0.25dB
F = 127.11	-0.07dB
F = 142.68	0.02dB
F = 160.16	0.07dB
F = 179.78	0.08dB
F = 201.8	0.09dB
F = 226.52	0.08dB
F = 254.27	0.07dB
F = 285.42	0.06dB

1/6th Octave Sampling above

10" Cat. CW-2116

F = 10	-41.95dB
F = 11.23	-37.42dB
F = 12.61	-32.74dB
F = 14.15	-27.9dB
F = 15.88	-22.85dB
F = 17.83	-17.65dB
F = 20.01	-12.85dB
F = 22.46	-9.55dB
F = 25.21	-8.05dB
F = 28.3	-7.28dB
F = 31.77	-6.52dB
F = 35.66	-5.62dB
F = 40.03	-4.63dB
F = 44.93	-3.61dB
F = 50.43	-2.67dB
F = 56.61	-1.84dB
F = 63.54	-1.18dB
F = 71.32	-0.69dB
F = 80.06	-0.35dB
F = 89.87	-0.14dB
F = 100.88	-0.01dB
F = 113.24	0.06dB
F = 127.11	0.09dB
F = 142.68	0.1dB
F = 160.16	0.1dB
F = 179.78	0.09dB
F = 201.8	0.08dB
F = 226.52	0.07dB
F = 254.27	0.06dB
F = 285.42	0.05dB

1/6th Octave Sampling above

15" Cat. CW-2131

F = 10	-35.14dB
F = 11.23	-31.17dB
F = 12.61	-27.25dB
F = 14.15	-23.44dB
F = 15.88	-19.76dB
F = 17.83	-16.28dB
F = 20.01	-13.12dB
F = 22.46	-10.37dB
F = 25.21	-8.1dB
F = 28.3	-6.29dB
F = 31.77	-4.89dB
F = 35.66	-3.81dB
F = 40.03	-2.98dB
F = 44.93	-2.33dB
F = 50.43	-1.83dB
F = 56.61	-1.43dB
F = 63.54	-1.12dB
F = 71.32	-0.88dB
F = 80.06	-0.69dB
F = 89.87	-0.54dB
F = 100.88	-0.43dB
F = 113.24	-0.34dB
F = 127.11	-0.27dB
F = 142.68	-0.21dB
F = 160.16	-0.17dB
F = 179.78	-0.13dB
F = 201.8	-0.1dB
F = 226.52	-0.08dB
F = 254.27	-0.07dB
F = 285.42	-0.05dB

1/6th Octave Sampling above



All Purpose Replacement Speakers

Mini Speaker

2 1/4" 57mm dia.
As used in many projects
Cat. AS-3000
\$2.20 ea
10+ \$1.80 ea



3 1/4" Cat. AS-3006
\$6.95
10+ \$6.75 ea



4" 100mm diameter.
Cat. AS-3008
\$6.95
10+ \$6.50 ea



5" 125mm diameter
Cat. AS-3010
\$8.95
10+ \$8.50 ea



6" 165mm diameter
Cat. AS-3012
\$12.95
10+ \$12.50 ea



Car Replacements

6" x 4" Cat. AS-3014
\$10.95 ea 10+ \$10.00 ea
7" x 5" Cat. AS-3016
\$12.50 ea 10+ \$12.00 ea



Midrange and Tweeter Level Control Bargain

This unit is designed for midrange and tweeter controls on multiway speaker systems. It is suitable for systems up to 80 watts power handling capacity. It presents a constant 8 ohm impedance to the load, and so does not disturb the crossover points. Unit is fully sealed, with mounting plate and is labelled high and mid with rotary controls. Both high and mid are in the one unit, and we can offer these far below normal price.
Cat. AC-1603
\$9.95



Midrange & Tweeter Level Controls

These units are designed for midrange and tweeter controls on multiway speaker systems. They are suitable for systems up to 80 watts power handling capacity. They present a constant 8 ohm impedance to the load, and so do not disturb the crossover points. Both units come with fully sealed mounting plates and are labelled 'mid' and 'high' respectively.
MIDRANGE Cat. AC-1680
TWEETER Cat. AC-1682
\$7.95 ea



7-Way Speaker Switch

This stereo speaker switch will enable you to select any combination of three pairs of speakers. Comes complete with wall plate. Has easy to connect screw terminals. Full instructions supplied. Separate switch for each pair of speakers. Not the cheap rotary switch type.
Cat. AC-1676
\$26.95



Extension Speaker

If you are after a rugged heavy duty extension speaker, then this is the one. It will handle up to 25 watts maximum and the impedance is 8 ohms. Speaker is a 3" foam suspension type and has a metal grille over the front to stop probing fingers, etc.

Supplied complete with metal mounting bracket and 5 metres cable terminated with a 3.5mm plug.
Cat. AS-3185
\$22.95



L-Pads

These function as a volume control directly at the speaker. They are similar to regular pots, but differ in that they present a constant load to the amplifier or crossover. (Important to maintain crossover performance).

100 Watt Mono Fader

This really is a high power unit ideal for PA applications or for remote speakers where a high powered amplifier is being used. Constant impedance design is suited to 8 ohm systems. Has heavy ceramic body and wirewound element. Supplied with metal silk screened fascia plate.
Cat. AC-1672
\$20.95



Grille Cloth

High quality, acoustically transparent grille cloth is ideal for protecting those expensive drivers - but making sure all of the sound gets through. Comes in a 1.5 x 1 metre roll. Black in colour.
Cat. CF-2752
\$13.50 metre



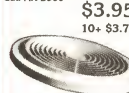
Speaker Grille Clips

Have you ever wondered how expensive speaker grilles are held in place? They use a plastic clip-in plug and socket. Now you can have them on your speakers instead of Velcro tape.
SET OF 4
Cat. CF-2761
\$3.95



8" Speaker Ceiling Grille

This grille suits the CE-2325 8" speaker. Ideal for PA/background music systems, extension speakers, etc. White in colour.
Cat. AX-3560
\$3.95
10+ \$3.75 ea



Speaker Sealant

This is a special non-hardening sealing compound, ideal for getting real airtight seals between drivers and cabinets. This is vital with the acoustic suspension designs popular today. 2 metre roll.
Cat. CF-2762
\$3.50



Audio Generator

This unit matches the QT-2312 RF generator in appearance. It too has a sturdy metal cabinet with carrying handle and large readout scale. The QT-2310 has the following features:

- High frequency stability: within $\pm 2\text{Hz}$
- Output voltage floating: within $\pm 1\text{dB}$
- Sine wave signal output: more than 8V rms
- Equipped with synchronised input terminal of signals enabling high power output signals to be accurately controlled by small signals.

SPECIFICATIONS:

Frequency Range: 10Hz - 1MHz 5 decade bands
Accuracy: $\pm 3\%$ $\pm 2\text{Hz}$
Output Impedance: 600 ohms, unbalanced
Output Control: High, Low (-40dB) and fine adjuster
SINE WAVE OUTPUT
Range: 10Hz - 1MHz
Output Voltage: 8V rms, max
Output Distortion: Less than 0.05% 400Hz - 20kHz
Less than 0.3% 20Hz - 200kHz
Less than 0.05% 500Hz - 5kHz
Less than 0.5% 50Hz - 500kHz
 $\pm 1\text{dB}$ (1kHz)

Output Flatness:

SQUARE WAVE OUTPUT

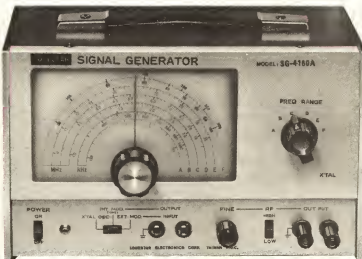
Range: 20Hz - 20kHz
Output Voltage: 15V p-p max
0.5uS

SYNCHRONISATION

Range: $\pm 3\%$ of oscillator frequency per Vrms
Input Impedance: Approx 10M ohm
Maximum Input: 10V rms
Power Requirement: AC 115/230V, $\pm 10\%$, 50/60Hz, 3VA
Dimensions: 150(H) x 250(W) x 130(D)mm
Weight: Approx 2.5kg
Accessories: Test lead 1, ground lead 1
Cat. QT-2310



\$239



Digital 400 Amp AC Clampmeter

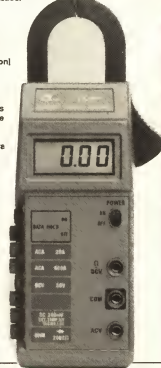
This is a direct import 1/2" LCD clampmeter with rugged hard vinyl carry case at an exceptionally low price - especially when you realise it has digital hold! (You can make a measurement in a dark and confined location, 'hold' the data on the display until you can comfortably read it. The unit is overload protected, has a carrying lanyard and is moulded in a high impact dark grey plastic case.

SPECIFICATIONS

- AC Current: 20A (0.01A resolution)
400A (1A resolution)
1000A overload (1 minute)
- Resistance: 2000 ohms (1 ohm resolution)
- Diode check
- AC Volts: 750 (1V resolution)
- DC Volts: 200mV (for plug-in modules such as Digital Temperature adaptor)
20V (0.01V resolution)

Data hold available on all of the above
(includes multi-meter style probe).
Size: 225(H) x 75(W) x 45(D)mm
Cat. QM-1570

\$139.95



Signal Generator

This fully solid state product is capable of generating stable RF from 100kHz to 150MHz. It is designed as both a bench and portable instrument.

It also features an internal 1kHz oscillator to modulate the RF carrier.

External modulation to the RF output is provided as well.

The QT-2312 is supplied in a sturdy metal cabinet, with carrying handle and large easy to read scaled readout panel.

It is ideal for checking and aligning the front ends of AM, FM and TV sets.

SPECIFICATIONS

Frequency Range:

- | | |
|---|------------------|
| A | 100kHz - 300kHz |
| B | 300kHz - 1000kHz |
| C | 1MHz - 3.2MHz |
| D | 3.0MHz - 10MHz |
| E | 10MHz - 35MHz |
| F | 32MHz - 150MHz |

Up to 450MHz on 3rd harmonics

Frequency Accuracy:

$\pm 3\%$

RF Output:

100mV rms, approx (up to 35MHz)

Output Control:

High-Low switch and fine adjuster

Modulation:

INT. 1kHz (AM) 30% approx.

EXT. 50Hz - 20kHz, at less than

1V rms input

Audio Output:

1kHz, MIN. 1V rms (fixed)

Crystal Oscillator:

For 1 - 15MHz crystal in type

HC-6u holder (not included)

Power Requirements:

AC 115/230V, 50/60Hz,

approx 3VA

Dimensions:

150(H) x 250(W) x 130(D)mm

Weight:

Aprox. 2.5kg

Cat. QT-2312

\$219



AC Millivoltmeter

The model QT-2320 is a sideband Millivolt Meter for measuring AC voltages from 0.3mV to 100V in 12 ranges with bandwidth of 5Hz to 1MHz. Each range shares 10 dB. The effective sensitivity at 0.3mV range is 30uV. This voltmeter is equipped with three colour scales for easy visual distinction, namely Volt, dB and dBm. The millivoltmeter also has a FET input with 10M ohm input impedance so circuit loading is negligible. Finally once again supplied in a sturdy metal case with carrying handle.

SPECIFICATIONS

Voltage Range: 0.3, 1, 3, 10, 30, 100, 100V
dB Range: 0.3, 1, 3, 10, 30, 100V; in 12 ranges
 -70, -60, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, dB (dBm: 1Vrms, 0dBm= 0.775V)
Accuracy: $\pm 3\%$ of full scale to 1kHz or 400Hz
Input Impedance: 10M ohm for each range. 40pF or less.
Bandwidth: $\pm 5\%$, 10Hz - 500kHz
 $\pm 10\%$, 5Hz - 1000kHz
Amplifier Output: 1 Vrms at full scale 600 ohm Impedance
Power Requirements: AC 115/230V, 50/60Hz, Approx 5VA
Dimensions: 205(H) x 155(W) x 145(D)mm
Weight: Approx 2kg

Cat. QT-2320

\$225



150Mhz Universal Digital Frequency Counter

Up to 8 digit resolution between 10Hz and 150MHz. It has many features amongst which is a memory hold switch which enables the counter to retain a measured frequency permanently on display until not needed. This is not a kit it is a fully built unit with a 3 month warranty.

SPECIFICATIONS:

Frequency Range: 10Hz - 150MHz (max)
No of Digits: 8 LED display
Gate Time: 0.01s, 0.1s, 1s, 10s
Input Sensitivity: kHz range: 10Hz - 10MHz 50mVrms
 MHz range: 1MHz - 150MHz 40mVrms
Resolution: 0.1Hz at 10 sec gate time
 1Hz at 1 sec gate time
 10Hz at 0.1 sec gate time
 100Hz at 0.01 sec gate time
 0.2 seconds
Response Time: 10.00MHz (crystal oscillator ± 10 ppm)
Time Base: 6V DC battery or 9V DC 250mA adaptor
Power Supply: 1M ohm
Impedance: x1 or x10
Attenuator: Reset the counter to zero
Reset: MHz, kHz
Readout Units: Hold the last input signal
Hold: 250 x 170 x 70mm
Dimensions: BNC to 2 x alligator lead supplied
Accessories: Includes 240V AC - 9VDC power supply
Cat. QT-2330



Cat. QT-2330

\$199.50



Colour Bar Pattern Generator

The QT-2325 is designed for repair or adjustment of Australian/New Zealand standard PAL system TV. The RF output covers Australian channel 3 and 4. This clever design uses a crystal controlled progressive scanning circuit and is portable.

SPECIFICATIONS

RF Range: PAL-B,D,G,H,K,L,K. System, VHF 55Hz - 63MHz, continuously adjustable; with 55.25MHz preset
RF Output Level: 10mVrms into 300 ohm load
Impedance: 300 ohm balanced
Synchronising Signals: X'tal, vertical 50.036Hz, horizontal 15.611kHz
Sub-Carrier Frequency: 4.43861875MHz ± 50 Hz
Pattern: 1. Colour divided into upper and lower portions
 Upper half: Red, Blue, Green, Yellow, White
 Lower half: four Grey, Black
 2. Dots 19(H) x 15(V) White
 3. Crosshatch 19 x 15 squares, White
 4. Vertical lines 19 White
 5. Horizontal lines 15 White
 6. Rasters fixed 100% brightness White
Power Requirements: 240V AC 50Hz
Dimensions: 55(H) x 150(W) x 200(D)mm
Weight: 1.2kg
Cat. QT-2325



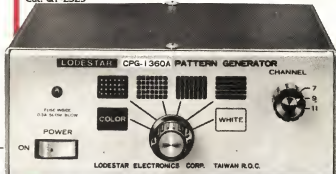
Power Requirements:

Dimensions:

Weight:

Cat. QT-2325

\$249



Temperature Probe Adaptor for Digital Multimeters

This device simply plugs into the banana sockets of your digital multimeter. It will give an output of 1mV (millivolt) for every degree increase in temperature. This means that on, say, your 200mV DC range you can read the temperature on the multimeter directly. You can switch from °C to °F. A very high quality probe with semiconductor sensor in the tip. A generous curl cord connects the probe and adaptor housing. Requires 9V cell.

SPECIFICATIONS:

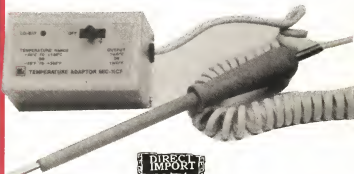
Linear Voltage Output: 1mV/°C or 1mV/°F
Measurement Range: -50°C to +150°C or -58°F to 302°F
Accuracy: $\pm 0.5^\circ\text{C}$ or $\pm 1^\circ\text{F}$
Sensor: Semiconductor type
Power: 006P 9V battery
Current Consumption: 2mA typical
Response Time: From 23°C to 99.3°C 30 sec in stirring water
Battery Check: "LOBAT" LED lights automatically when battery is exhausted

Dimension: Probe: 55mm x 1.60mm
 Adaptor: 38(W) x 70(L) x 39(H)mm
 Wire: 3.5 metre retractable cord
 120 grams

Weight:

Cat. QM-1590

\$59.95



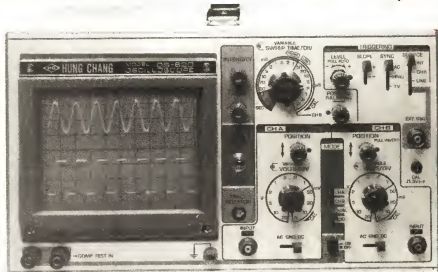
Hung Chang 20MHz Dual Trace Oscilloscope

Another Jaycar Direct Import from Korea.
High quality OS620 Oscilloscope.

**DIRECT
IMPORT**

**NEW
FOR
\$89**

- Wide bandwidth and high sensitivity
- Internal graticule rectangular bright CRT
- Built-in component tester
- Front panel trace rotator
- TV video sync filter
- Z axis (intensity modulation)
- High sensitivity X-Y mode
- Very low power consumption • Regulated power supply circuit



COMPONENT TESTER is the special circuit with which a single component or components in circuit can be easily tested. The display shows faults of components, size of a component value, and characteristics of components. This feature is ideal to troubleshoot solid state circuits and

SPECIFICATIONS

CRT
Size: 6" (150mm) flat-faced high brightness CRT with internal graticule
Effective Display Area: 8 x 10 div (1 div = 10mm)
Acceleration Potential: 2kV

VERTICAL
Operating Modes: CH-A, CH-B, DUAL, ADD (CH-B can be inverted)
Dual Mode: Alt: 0.2µs - 0.5ms/div, Chop: 1ms - 0.5s/div
Chop frequency 200kHz approximately
Deflection Factor: 5mV/div 20V/div ±3%, 12 ranges in 1-2.5 steps with fine control
Bandwidth: DC - 20MHz (-3dB), AC: 10Hz - 20MHz (-3dB)
Rise Time: Less than 17ns
Overshoot: Less than 3%
Input Impedance: 1M ohm ±5%, 20pF ±3pF
Maximum Input Voltage: 600V p-p or 300V (DC + AC peak)
Channel Isolation: Better than 60dB at 1kHz

HORIZONTAL

Sweep Mode: NORMAL and AUTO
Time Base: 0.2µs - 0.5s/div ±3%, 20 ranges in 1-2.5 steps with fine control
Sweep Magnifier: 5 times (5X MAG)
Linearity: 3%

TRIGGERING
Sensitivity: INTERNAL: 1 div or better for 20Hz - 20MHz (Triggerable to more than 30MHz), EXTERNAL: TV p-p or better for DC - 20MHz (Triggerable to more than 30MHz)

Source: INT, CH-A, CH-B, LINE and EXT
Slope: Positive and Negative, continuously variable with level control PULL AUTO for free-run

Coupling: AC, HF-REJ and TV, TV SYNC Vertical and Horizontal Sync Separator Circuitry allows any portion of complex TV video waveform to be synchronised and expanded for viewing TV-H (Line) and TV-V (Frame) are switched automatically by SWEEP/TIME/DIV switch
TV-V: 0.5µs/div to 0.1ms/div, TV-H: 50µs/div to 0.2µs/div

X-Y OPERATIONS
X-Y Operation: CH-A: Y axis, CH-B: X axis Highest Sensitivity: 5mV/div

COMPONENT TESTER
Component Tester: Max AC 9V at the terminal with no load, Max current 2mA when the terminals are shorted. (Internal resistance is 4.7k ohm)

OTHER SPECIFICATIONS
Intensity Modulation: TTL Level (3V p-p); Positive - brighter BANDWIDTH: DC - 20MHz
MAXIMUM INPUT VOLTAGE: 50V (DC + AC peak)
Calibration Voltage: 0.5V p-p ±5%, 1kHz ±5% Square wave
Trace Rotation: Electrically adjustable on the front panel
Power Requirement: AC: 100, 120, 220, 240, 20W
Weight: 7kg approx.
Size: 162(H) x 294(W) x 352(D)mm

Cat. QC-1900

CRO Probes to suit \$49.50 each - Cat. QC-1902 - see page 44 for full details

\$899

components with no circuit power. Testing signal (AC max 2mA) is supplied from the COMPONENT TESTER IN terminal and the result of the tests is fed back to the scope through the same test lead wire at the same time.

Digital L-C Meter

This direct import product is outstanding value for money. It is moulded in a high impact dark grey plastic case with built-in tilting ball, includes spare fuse (built-in) and colour coded panel. A very comprehensive instruction manual is provided.

CAPACITANCE			
Range	Resolution	Test Freq.	Voltage across C under test
2nF	1pF	1kHz	150mV
20nF	10pF	1kHz	150mV
200nF	100pF	1kHz	150mV
2µF	1nF	1kHz	150mV
20µF	10nF	100Hz	150mV
200µF	100nF	100Hz	15mV

INDUCTANCE			
Range	Resolution	Test Freq.	Current thru H under test
2mH	1µH	1kHz	150µA
20mH	10µH	1kHz	150µA
200mH	100µH	1kHz	150µA
2H	1mH	1kHz	150µA
20H	10mH	100Hz	15µA

Specifications: • Accuracy (23°C±2°C)

Capacitance <0.5µF ±(1%+1d),

>0.5µF - ±(2%+1d), Inductance <0.5µH

±(2%+1d), >0.5µH ±(5%+1d),

Temperature coefficient capacitance

<0.5µF - 0.1%/°C, >0.5µF - 0.2%/°C,

Inductance <0.5H - 0.2%/°C, >0.5H -

0.5%/°C • Zero error capacitance 2nF

range, <5pF, inductance <10µH • Over

range - display shows '1' • Sampling

time 0.4 sec • Power supply 9V

battery 11mA (batt not supplied) •

Size 180 x 85 x 35mm • Weight 320

grams

Alligator clip test probes supplied.

Auto zero except on lowest

capacitance range.

Cat. QM-1575

\$219

**DIRECT
IMPORT**



Oscilloscope

Frequency Counter DMM + Capacitance Meter + Logic Probe + Diode Tester + 10 Amp Current + Compact Size + One Hand Operation

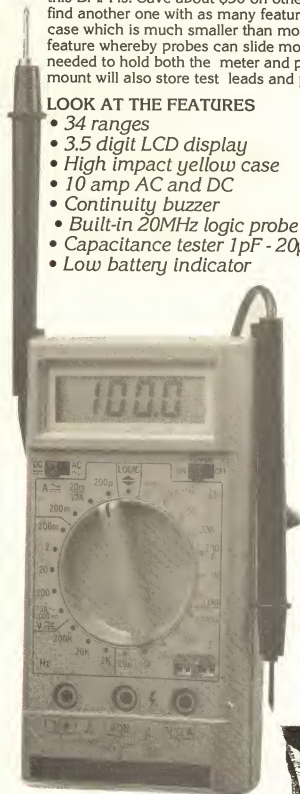
This is it! Compare the features and price and will discover what an absolute bargain this DMM is. Save about \$50 on other similarly equipped DMM's, that is if you can find another one with as many features. It's housed in a bright yellow high impact case which is much smaller than most DMM's. Includes unique one hand operation feature whereby probes can slide mount into either side of case so only one hand is needed to hold both the meter and probe tip in contact with the test point. Slide mount will also store test leads and probe.

LOOK AT THE FEATURES

- 34 ranges
- 3.5 digit LCD display
- High impact yellow case
- 10 amp AC and DC
- Continuity buzzer
- Built-in 20MHz logic probe
- Capacitance tester 1pF - 20 μ F
- Low battery indicator
- Frequency counter 10Hz - 200kHz
- Fuse protected
- High quality safety probes
- Automatic negative polarity indication
- Unique one hand operation
- Compact size only 135 x 72 x 31mm
- Diode Tester
- Tilting bail
- Safety test leads
- 3 month warranty



DIRECT IMPORT



SPECIFICATIONS

DC Voltage	Range	200mV 2V 20V 200V 1000V
	Resolution	100 μ V 1mV 10mV 100mV 1V
	Accuracy	0.5% + 1 significant figure
	Input Impedance	10M ohm
AC Voltage	Range	200mV 2V 20V 200V 750V
	Resolution	100 μ V 1mV 10mV 100mV 1V
	Accuracy	1.0% + 3 (max) least significant figure
	Input Impedance	4.5M ohm
DC Current	Range	200 μ A 2mA 20mA 200mA 10A
	Resolution	100nA 1 μ A 10 μ A 100mA 10mA
	Accuracy	200 μ A - 200mA 1.0% + 1 digit
		10A - 1.5% + 3 (max) least significant digit
AC Current	Range	200 μ A 2mA 20mA 200mA 10A
	Resolution	100nA 1 μ A 10 μ A 100 μ A 10mA
	Resistance	Range 200 2k 20k 200k 2M 20M
	Accuracy	100m 1 10 100 1k 10k
Overload Protection	Range	200 - 2M 0.8% + 2 digits least significant figure
	Resolution	2000pF 20nF 200nF 2 μ F 20 μ F
	Accuracy	1pF 10pF 100pF 1nF 10nF
		3% + 10 least significant figure
Frequency (Hz)	Range	2kHz 20kHz 200kHz
	Resolution	1Hz 10Hz 100Hz
	Diode	1mV - max test current 1.5mA
	Continuity	0.1 ohm - operation resistance below 30 ohm
Logic	Resolution	1Hz 10Hz 100Hz
	Input voltage	5V DC, Input Impedance 120k Ω

Cat. QM-1400

\$99.95



20 Range Digital Multimeter + 10 Amps + Diode Checker + One Hand Operation + Compact Size

A genuine low cost high performance digital multimeter at an unbelievable price. Now everyone can afford a quality digital multimeter. Includes unique one hand operation feature whereby probes can slide mount into either side of case so only one hand is needed to hold both the meter and probe tip in contact with the test point. Slide mount will also store test leads and probes.

LOOK AT THE FEATURES

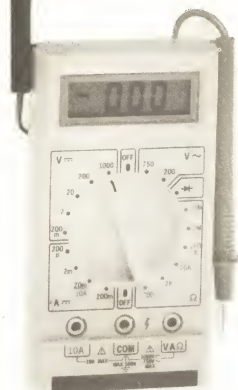
- 3.5 digit LCD display
- Diode checker
- 1500 hour battery life
- Low battery indicator
- Fuse protected
- Impact resistant yellow case
- Compact size 135 x 72 x 31mm
- High quality safety probes
- Automatic negative polarity indication
- One hand operation
- Tilting Bail
- 3 month warranty

\$59.95

DIRECT IMPORT

SPECIFICATIONS

SPECIFICATIONS						
DC Voltage	Range	200mV	2V	20V	200V	1000V
	Resolution	100µV	1mV	10mV	100mV	1V
	Accuracy	0.8% + 1 significant figure				
AC Voltage	Range	200mV	2V	20V	200V	750V
	Resolution	100µV	1mV	10mV	100mV	1V
	Accuracy	1.5% + 3 (max) least significant figure				
DC Current	Range	200µA	2mA	20mA	200mA	10A
	Resolution	100nA	1µA	10µA	100µA	10mA
	Accuracy	200µA - 200mA 1.0% + 1 digit 10A - 1.5% + 3 least significant digit				
Resistance	Range	200	2k	20k	200k	2M
	Resolution	100m	1	10	100	1k
	Accuracy	200 - 2M 1.2% + 2 digits				
Overload Protection	200 - 1.8% + 2 digits					
	500V DC, 350V AC, ohm 500V rms					



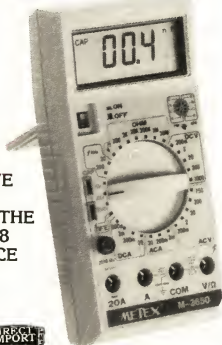
NEW
FOR
89

Frequency Counter DMM + Capacitance Meter + Transistor Tester + 20 Amp Current + High Impact Case!

This compact DMM is housed in a bright yellow high impact plastic case. It features a frequency counter capability to 200kHz, transistor test, diode test, continuity (with buzzer), capacitance meter, up to 20 amp current measurement and comprehensive AC/DC voltage, current and resistance ranges. This meter would be excellent value at \$259, but at \$129.50 it is absolutely sensational.

SAVE
\$30
ON THE
1988
PRICE

DIRECT IMPORT



\$129.50

Cat. QM-1555

SPECIFICATIONS

DC Voltage	Range	200mV, 2V, 20V, 1000V
	Resolution	100µV, 1mV, 10mV, 100mV, 1V
	Accuracy	200mV - 1000V ±0.3% + 1 digit
AC Voltage	Range	200mV, 2V, 20V, 200V, 750V
	Resolution	100µV, 1mV, 10mV, 100mV, 1V
	Accuracy	200mV-200V ±0.8% rdg + 3 digits
DC Current	Range	200µA, 2mA, 20mA, 200mA, 20A
	Resolution	100nA, 1nA, 10µA, 100µA, 10mA
	Accuracy	200µA-20mA ±0.5% rdg + 1 digit
unfused	Range	200mA ±1.2% rdg + gt
	Resolution	10A ± 2.0% rdg + 5 digits - 10A range
AC Current	Max IP Amps	10A (20A up to 60 secs)
	Range	2mA, 20mA, 200mA, 10A
	Resolution	1µA, 10µA, 100µA, 10mA
unfused	Range	2mA-20mA ± 1.0% rdg + 3 digits
	Resolution	200mA ± 1.8% rdg + 3 digits
	Accuracy	10A ± 3.0% rdg + 7 digits - 10A range
Resistance	Range	200, 2k, 20k, 200k, 2M, 20M ohms
	Resolution	0.1, 1, 10, 100, 1k, 10k ohms
	Accuracy	200 ohm ± 0.5% rdg + 3 digits
500V	Range	2k ohm - 2M ohm ± 0.5% rdg + 1 digit
	Resolution	20M ohm ± 0.5% rdg + 2 digits
	Accuracy	200 ohm 250V DC/AC rms, 2k - 20M ohm
Capacitance	Protection	DC/AC rms
	Range	200nF, 2µF, 20µF
	Resolution	100pF, 1nF, 10nF
Frequency	Range	200nF-µF ± 3.0% + 5 digits
	Resolution	0 - 200kHz
	Accuracy	0 - 200kHz
Full overload protection		

Frequency Counter DMM + Temperature + Capacitance + Transistor Tester + Diode + 20 Amp + Data Hold

This really is the all singing, all dancing digital multimeter. Quality brand direct imported by Jaycar to save you money.

LOOK AT THESE FEATURES

- Frequency Counter 20Hz - 200kHz
- Temperature measurement -20° - 1200°C
- Transistor Tester
- Diode Tester
- Continuity Buzzer
- Data Hold
- 20 amp Current
- 28 ranges
- Low Battery Indicator
- Overload Protected on all Ranges

\$169

Cat. QM-1450



SPECIFICATIONS

DC Voltage	Range	200mV	20V	200V	1000V
	Resolution	100µV	10mV	100mV	1V
	Accuracy	±(0.5% of reading + 1 digit)			
AC Voltage	Range	200mV	20V	200V	750V
	Resolution	100µV	10mV	100mV	1V
	Accuracy	±0.5% ±0.75% ±0.75% ±1%			
DC Current	Freq. range	45Hz - 500Hz on all ranges			
	Range	2mA	20mA	20A	
	Resolution	1µA	100µA	10mA	
AC Current	Range	2mA	20mA	20A	
	Resolution	1µA	100µA	10mA	
	Accuracy	±0.75% ±0.75% ±2%			
Resistance	Max FS Volt drop	0.25V	0.25V	0.30V	
	Range	200	2k	20k	2M
	Resolution	100m	1	10	1k
Capacitance	Max FS Volt drop	0.25V	0.25V	0.30V	
	Range	200	2k	20k	2M
	Resolution	100m	1	10	1k
Frequency	Max FS Volt drop	0.25V	0.25V	0.30V	
	Range	200	2k	20k	2M
	Resolution	100m	1	10	1k

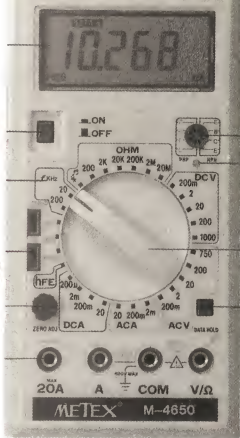
4.5 Digit DMM + Frequency + Transistor Tester + Capacitance Meter + Data Hold + 20 Amp Current

The Metex M4650 is ideal for the enthusiast/technician/engineer who needs the high resolution of a 4.5 digit meter.

This meter incorporates about every feature you could ever want, including data hold which enables you to take a reading and HOLD that reading on display even after you have removed the probes. Also included is a frequency counter, which is the first time we have been able to offer this feature in a 4.5 digit meter. Also features 20 amp current capability plus the Metex M4650 is staggeringly accurate - see specs.

Cat. QM-1560

\$199



Specifications

DC Voltage	Range	200mV	2V	20V	200V	1000V
	Resolution	10µV	100µV	1mV	10mV	100mV
	Accuracy	±0.5% of rdg + 3 digits				
AC Voltage	Range	200mV	2V	20V	200V	750V
	Resolution	10µV	100µV	1mV	10mV	100mV
	Accuracy	±0.5% of rdg + 10 digits				
DC Current	Range	200µA	2mA	200mA	20A	
	Resolution	10nA	100nA	10µA	1mA	
	Accuracy	±0.3% ±0.3% ±0.5% ±0.8%				
AC Current	Range	2mA	20mA	20A		
	Resolution	100nA	10µA	1mA		
	Accuracy	±0.8% ±1.0% ±1.2%				
Resistance	Range	200	2k	20k	200k	2M
	Resolution	10m	1	10	100	1k
	Accuracy	0.15% 0.15% 0.15% 0.15% 0.15% 0.5% all ±				
Capacitance	Range	2000pF	200nF	20µF		
	Resolution	0.1pF	10pF	1nF		
	Accuracy	±2.0% ±2.0% ±3.0%				
Frequency	Range	200kHz	20kHz	10Hz		
	Resolution	1Hz	10Hz			
	Accuracy	±2% ±2% rdg + 10 digits				

Economy Model Multimeter

Ideal as a first meter. Compact enough to fit into the glove box in your car.

- 2,000 ohms/volt sensitivity
- Mirror scale to prevent parallax error
- Complete with test leads and instructions
- DC & AC volts 0-10, 50, 250 & 1000V
- -10 to +22dB
- 0-100mA current
- 0-1M ohm (2 ranges)
- Measures 90 x 50 x 30mm
- Battery included
- Cat. QM-1001

\$17.50



Medium Sensitivity Low Cost Multimeter

- 10,000 ohms/volt sensitivity
- Fuse and diode overload protection
- Total of 18 ranges
- Battery supplied 1 x AA cell
- Mirrored scale to minimise parallax errors
- 0.25, 2.5, 25, 250, 1000V DC
- 10, 50, 250, 1000V AC
- 0.1, 1, 10, 500mA DC current
- 0-10M ohm in 3 ranges
- Safety off position to protect meter movement
- Size: 63 x 105 x 30
- Cat. QM-1015

\$26.50



Logic Tester

Quality logic probe. Will test all logic families (TTL, LS, CMOS, etc). Pulse/normal switch to indicate pulse or continuous signals. Three LEDs plus a small audio transducer provide the logic level indication. Will detect pulse widths as narrow as 25ns and for frequencies to 20MHz. Now directly imported by Jaycar, we've been able to lower the price by \$10. No middlemen!
As reviewed by Silicon Chip magazine in October 1988.

- | | |
|---------------------------|----------------------|
| Specifications | DC 4 - 16V |
| Working Voltage | Max 32mA @ 5V |
| Current Consumption | Max 20MHz |
| Frequency Response | Response Pulse Width |
| Response Pulse Width | Longer than 25ns |
| Input Impedance | Min 1M ohm |
| Input Overload Protection | ±250V DC/AC |
| Supply Voltage Protection | ±50V DC/AC |
| Operating Temperature | -20 +70°C |

Cat. QT-2210

\$29.95



Mini VOM Multitester

Ideal multimeter for the hobbyist.

- 20,000 ohms/volt
- Continuity buzzer
- 23 ranges
- 1.5 and 9V battery tester
- Safety test leads
- Handle which doubles as tilting aid
- DC volts 2.5, 10, 50, 250, 1000
- AC volts 10, 50, 250, 1000
- DC current 5, 50, 500mA, 10A on separate jack
- Resistance R x 1, R x 10, R x 1k
- Decibels -8dB to +62dB on all AC ranges
- Size: 135 x 90 x 40
- Cat. QM-1022



\$39.95



Electronic FET VOM

The best analogue meter we could find is now available and it's under \$100!

LOOK AT THE FEATURES:

- Full electronic operation (FET)
- 12A DC & AC current ranges
- High input impedance
- Polarity reverse switch
- Safety test leads
- Zero ohms adjust
- Mirrored meter dial
- Tilt stand
- Fuse protected
- Working indicator

SPECIFICATIONS:

- DC volts 0-3, 1-2, 12, 30, 120, 300, 1200
- Input impedance approx 10M ohms
- AC volts rms 0.3, 12, 30, 120, 300, 1200
- Peak-Peak 0-8.4, 33, 84, 330, 840, 3300
- dB -10dB - +63dB at AC ranges
- DC current 0-0.1uA, 0.3, 3, 30, 300mA, 12A
- Potential drop 300mV
- AC current ranges 0-12A
- DC resistance R x 1, R x 10, R x 100, R x 1k
- R x 10k, R x 1M
- Size: 125 x 170 x 50mm

Cat. QM-1050



\$79.95

Mutimeter Test Probes

Test probes to 4mm banana plugs (red and black).
Cat. WT-5316 **\$4.95**



Multimeter Test Probes

Test probes to 2mm multimeter pin plugs (red and black).
Cat. WT-5315 **\$4.95**



Plastic Bodied Low Cost pH Meter Probe

As used in Silicon Chip pH meter. This polypropylene bodied probe is a price breakthrough. The membrane protector is an integral part of the barrel. The QP-2230 has a 'spoon' shaped membrane which allows easy and effective cleaning with a cotton bud.

SPECIFICATIONS:
pH Range 0 - 14
Response 90% 20 secs
Temp 0 - 80°C
Cable Coaxial 0.8 metre long unterminated

Buffer solutions included.
Cat. QP-2230

\$79.95



16 Piece Test Lead Set

Consists of 2 leads with screw sockets one each end and attachments screw in. 4 x Alligator clips, 4 x 2mm pin tips, 4 x banana plugs, 2 x spade lugs. All colour coded red and black.
Cat. WT-5218 **\$9.95**



CRO Probe

A high quality probe set consisting of 1.4mm quality cord terminated at one end with a moulded-on stainless steel BNC connector and 1 x, 10x attenuator probe at the other end.

An earthing lead 280mm long with alligator clip to connect to the probe at the other end is provided. Also provided is an adaptor that slides on to the probe to change the probe tip to a spring hook.

Cat. QC-1902

\$49.50



Panel Meters Style MU45

Moving coil type. Overall size: 58(W) x 52(H)mm. Mounting hole centre 38 x 38mm. 44mm meter hole. Nuts and washers supplied.

Cat. QP-5010 0-1mA 200 ohms resistance
Cat. QP-5012 0-50uA 3,500 ohms
Cat. QP-5013 0-1A 0.02 ohms resistance
Cat. QP-5014 0-5A 0.02 ohms resistance
Cat. QP-5020 0-20V 2,000 ohms resistance
Cat. QP-5022 0-30V 3,000 ohms resistance
Cat. QP-5030 'VU meter'

\$16.95 each

10 or more \$15.95 each



Style MU52E

Moving coil type. Overall size: 80(W) x 66(H)mm. Mounting hole centres 64(W) x 48(H)mm. 50mm meter mounting hole. Nuts and washers supplied.

Cat. QP-5036
0-1mA 200 ohms resistance
Cat. QP-5038
0-5A 0.02 ohm resistance
(Similar overall appearance to MU65)

\$19.95 each

10 or more \$18.95 each



Style MU65

Moving coil type. Overall size: 100(W) x 82(H)mm. Mounting hole centres 80(W) x 64(H)mm. 63mm meter hole. Nuts and washers supplied.

Cat. QP-5040
0-1mA 200 ohms resistance
Cat. QP-5042
0-100uA 2,000 ohms resistance

\$21.95 each

10 or more \$20.95 each



VU Meter

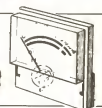
Brand new meter, as used in our 8002 mixer.

Overall size 48(W) x 45(H)mm. Meter size 44(W) x 25(H)mm.

Yellow background with 'REC LEVEL' on meter.

Cat. QP-5058

\$9.95



Centre Zero Tuning

Yellow background. Cutout 17mm
Size: 35(W) x 33(H)mm

QP-5054

\$9.95 10+ \$9.50

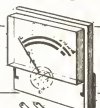


Signal Strength

Yellow background. Cutout 17mm
Size: 35(W) x 33(H)mm

Cat. QP-5056

\$9.95 10+ \$9.50



Edge Meter

Calibrated from 0 to 10. 35 x 15mm mounting
Cutout 49mm (hole centres) Cat. QP-5050

\$9.95 10+ \$9.50



DPMs from LASCAR LASCAR

Lascar Electronics is the world's most advanced manufacturer of quality surface mount technology (SMT) digital panel meters. Jaycar has represented Lascar since 1981 and in that time 10's of thousands of Lascar DPMs have been sold by us and are giving reliable service. Jaycar's OEM division can supply R&D and volume users at special prices. Contact Gary Johnston TODAY for full specs on the DPM's and for quantity prices. Free catalogue available on request for OEM users. Call (02) 747 2022, telex AA72293, Fax 02 744 0767

DPM400 3.5 Digit

This uniquely compact LCD DPM is ideally suited for low or high volume applications. The meter uses a 1/8 DIN standard snap-in bezel (48 x 24) for fast assembly. Auto zero, auto polarity, programmable decimal points and 200mV are standard features. On card pads make selection of operating mode a quick and convenient operation. At present this is the world's smallest off-the-shelf DPM.

- 10mm character height • Ultra low profile • Ultra compact • Annunciators • Snap-in bezel • Can plug into a 28 pin IC skt • Surface mount technology

PANEL CUT OUT 45 x 22mm - 10mm CHARACTER HEIGHT
Cat. QP-5502

\$79.95 ea

10 or more
\$75.00 each

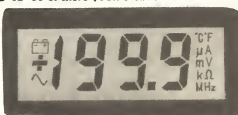


DPM500 3.5 Digit

This meter features compatibility with the popular 7106, 26 & 36 range of A/D converters and as a single component can replace cumbersome LCD, A/D and numerous discrete components in existing applications. Auto zero, auto polarity, 200mV FSD, 12.5mm (1/2") digit height and programmable decimal points are standard. There are many engineering symbols and an output for auto ranging use. On card solder pads for hard wiring of operating mode make setting up quick & easy. • 12.5mm character • Ultra low profile • Ultra low power • Snap-in bezel • Can plug into a 40 pin IC socket

PANEL CUTOUT 57 x 27mm - 12.5mm CHARACTER HEIGHT
Cat. QP-5504

\$85.00 ea 10 or more **\$81.50** each



DPM2000 3.5 Digit

This meter features large character height and very high stability as well as a very large range of engineering symbols in the window. A negative rail generator IC-7660 can easily be fitted to enable the DPM to run from single polarity supplies. Auto zero, auto polarity and programmable decimal points are standard.

- 15mm Characters • Ultra low power • Many Annunciators • External bandgap reference • Single ended differential or ratiometric mode

PANEL CUTOUT 68 x 33mm - 15mm CHARACTER HEIGHT
Cat. QP-5506

\$89.95 ea 10 or more **\$85.00** each

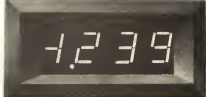


DPM-40 3.5 Digit LED

A compact low-cost LED DPM ideally suited for applications where a bright display under all conditions is required. The DPM 40 is fitted with High Efficiency 11mm LEDs and is supplied with a circularly polarised red filter and bezel giving a high contrast display. Auto zero, auto polarity, programmable decimal points and 200mV FSD are standard features. Easily programmed by user to read volts, current or other engineering units. May be used in single-ended or differential mode, or to measure floating inputs.

- Low cost • High brightness LEDs • High contrast display • Single ended or differential inputs

PANEL CUTOUT 68 x 33mm **\$98.00** 10+ **\$92.50** ea
Cat. QP-5542



*DPM-200 Panel Meter

A low profile LCD DPM with a range of useful symbols. The DPM 200 features 15mm 3.5 digit display, and ultra low current consumption and a bandgap reference for high stability. It also features auto-zero, auto-polarity, 200mV f.s.d. It may be used in single-ended, differential or ratiometric modes. The f.s.d. can easily be changed by the user to indicate any other units. The decimal points and symbols can all be driven from an internal source. Wide supply rail (5-15V DC) with a variable threshold low battery warning indicator. Supplied with mounting clips and comprehensive data sheet.

- Ultra low power • Separately addressable annunciators • 15mm digits • Bandgap reference

Cat. QP-5510 NOT RECOMMENDED FOR NEW OEM DESIGNS

\$89.95

10 or more
\$85.00 each



*DPM50 3.5 Digit LCD DPM

SPECIFICATIONS

Accuracy 0.1% ± 1 count
Linearity ± 1 count Samples/sec 3
Temp Stability 50ppm typical
Temp Range 0 - 50°C Supply Voltage 5 - 15V DC Supply Current 200μA typical Max DC Input Volts ±20V
CHARACTER HEIGHT - 12.5mm Cat. QP-5513

\$98.00 10+ **\$92.50** ea



*DPM-60 4.5 Digit LCD DPM

SPECIFICATIONS

Accuracy 0.01% ± 1 digit Linearity ± 1 digit Samples/sec 16 Temp Stability 50ppm/°C typical Temp Range 0 - 35°C Supply Voltage 7.5 - 15V Supply Current 1mA typically Max DC Input Volts ±20V
CHARACTER HEIGHT 10mm
Cat. QP-5520

\$169.00 10 or more **\$164.00** each

*C7224 4.5 Digit Universal

SPECIFICATIONS

Supply Voltage (5.5V abs max) 7.5 - 15V unregulated 5V DC regulated
Typ Current Consumption 1mA Maximum Count 19999 Max Counting Rate 10MHz Typical (Schmitt Trigger) Count Input Level VTH 2.5V VTL 2V Min DC Input Level 0V Max DC Input Level 5V Op. Temp Range 0 - 50°C
CHARACTER HEIGHT 10mm
Cat. QP-5530

\$129.00 10 or more **\$124.00** ea



*Types denoted with an asterisk are not recommended for new designs but are still kept in stock for replacement purposes.

Deluxe Black Rack Cabinets with Handles

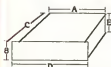
QUALITY AND DESIGN FUNCTIONABILITY AT A DOWN TO EARTH PRICE -

A JAYCAR DIRECT IMPORT PRODUCT

Jaycar proudly announce a range of 5 beautiful black, direct import rack cabinets.

Give your equipment a real 1st class appearance. All aluminium construction, removable top and bottom panels, black finish with high quality brushed anodised front panel. Handles and rubber feet supplied, along with all screws, nuts, etc., to assemble. Individually cartoned, supplied in flat pack. These cabinets really look the part and check out the low prices compared to other ones.

	A	B	C	D	E	Each	5+
HB-5380	255	73	177	305	75	\$39.50	\$36.50
HB-5381	353	98	203	401	100	\$49.50	\$46.00
HB-5382	429	62	203	481	69	\$49.50	\$46.00
HB-5383	429	95	292	481	100	\$65.00	\$61.00
HB-5384	429	122	292	481	126	\$75.00	\$70.00



DIRECT IMPORT



High Energy Rack Case

The use of Super Heavy Duty Heatsinks as rack case sides now allows a myriad of amplifiers, power supplies, battery chargers, etc., to be built in an 'Off the Shelf' rack case.

FANTASTIC FOR STEREO AMPLIFIERS

Using heatsinks will accommodate an audio output stage of approximately 120W with normal efficiency and dissipation. A great chassis for heavy duty power supplies and battery chargers. Allows the simple fitting of computer type fans to inside back of rear panel, adjacent to each respective heatsink.

SPECIFICATIONS

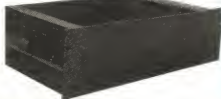
Front Panel	3 unit rack size 480 x 132 x 3mm
Rear Panel	1.6mm aluminium
Base/Top	1mm steel, ventilation slots provided
Internal Dimensions	125 x 370mm x 250mm
External Dimensions	130 x 440 x 252mm plus standard front panel
Finish	Black anodised aluminium plus powdercoat top and bottom

Cat. HB-5400

ONLY
\$129.50

4 or more

\$122.50 each



Deluxe Rack Cabinets

NOW YOUR PREAMPS, AMPS, CONTROL MODULES, MONITOR PANELS etc., CAN LOOK EVERY BIT AS GOOD AS TECHNICS, NAKAMICHI AND OTHER TOP MANUFACTURERS

These beautifully crafted rack cabinets will give your equipment a real 1st class appearance. All aluminium construction. Removable top and bottom panels. Natural or black finish. All dimensions conform to the International standard. Ventilated lid. Deluxe brush finish anodised front panel. Individually cartoned. Supplied in flat pack form and easily assembled in a few minutes.

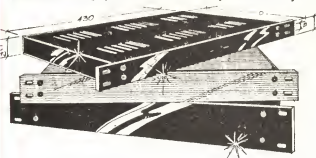
SIDE ELEVATION: D = 254mm; C (internal chassis height); B (mounting bolt centres).

	Finish	A	B	C	Each	5+
Cat. HB-5411	Natural	44	34	38	\$65.00	\$62.00
Cat. HB-5413	Natural	88	57	82	\$75.00	\$71.00
Cat. HB-5415	Natural	132	89	126	\$90.00	\$85.00
Cat. HB-5410	Black	44	34	38	\$65.00	\$62.00
Cat. HB-5412	Black	88	57	82	\$85.00	\$80.00
Cat. HB-5414	Black	132	89	126	\$95.00	\$90.00

Before other rack cabinets that do not conform to International Rack sizing.

SIX NATURAL AND BLACK FINISH MODELS

The black or natural finish cabinets are available in 44mm, 88mm or 132mm high modules. Mounting hole centres conform exactly to International Racking Specifications both vertically and horizontally.



Blank Rack Panels

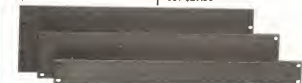
Of the same high quality as our International Rack series.

NATURAL FINISH

Cat. HB-5431	44mm	\$13.95
10+	\$13.00	
Cat. HB-5433	88mm	\$16.95
10+	\$16.00	
Cat. HB-5435	132mm	\$22.50
10+	\$21.50	

BLACK FINISH

Cat. HB-5430	44mm	\$11.50
10+	\$11.00	
Cat. HB-5432	88mm	\$23.95
10+	\$23.00	
Cat. HB-5434	132mm	\$28.50
10+	\$27.50	



Economy Rack Cabinet

- Solid steel construction
 - Black anodised front panel
 - 3 unit (132mm)
 - Conforms to International standards
 - Ventilated top and side panels
- Dimensions 430(W) x 295(D) x 125(H)mm
Cat. HB-5402

\$79.50



Rack Frames

FANTASTIC RACKING SYSTEM AVAILABLE IN 2 FORMATS

(1) **RACKING FRAME ONLY** Fantastic for neatly housing your home Hi Fi system. Looks fine as is with your various sound system modules bolted in place, however, should the little woman disagree, then it is dead simple to obtain some low cost timber panels from your local cabinet shop to fill the side and top recesses. Edging of the timber is not required due to the 12mm recesses.

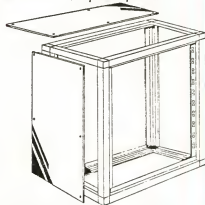
(2) **COMPLETE EQUIPMENT CABINET** with the simple addition of the panel sets you now have a series of professional equipment cabinets of appearance and ruggedness second to none - and just look at the savings!

ASSEMBLY Each Frame System is supplied complete with 12 custom extruded pieces, 6 clip-in M6 captive nuts and 6 M6 mounting screws. The sections and corner pieces simply push-fit together. A rubber or wooden mallet is recommended to fit it all together, they are self aligning pieces. Further strength can be obtained by pop riveting the various overlapping extruded sections if desired, although we hardly feel this is necessary.

SIDE AND TOP PANELS Tough powder coat medium grey gives a pleasing contrast with natural anodised frame. The resultant product is extremely professional in appearance and well and truly strong enough for the heaviest of electronic equipment.

SUPPLIED IN FLAT PACK FORMAT EASILY ASSEMBLED IN MINUTES RACK FRAME SET 6 UNIT (370mm)

Cat. HR-5210	\$109.50
PANEL SET FOR 6 UNIT	
Cat. HR-5215	\$ 49.00
RACK FRAME SET 18 UNIT (907mm)	
Cat. HR-5220	\$139.50
PANEL SET FOR 18 UNIT	
Cat. HR-5225	\$ 89.00
RACK FRAME SET 30 UNIT (1450mm)	
Cat. HR-5230	\$169.50
PANEL SET FOR 30 UNIT	
Cat. HR-5235	\$129.00
SCREWS AND CAPTIVE NUTS TO SUIT	
Cat. HP-0645 16mm bolts pack of 12 Silver	\$2.95
Cat. HP-0640 Captive nuts pack of 12 \$4.95	
Cat. HP-0646 16mm black bolts	
Philips head pack of 12 \$2.95	



Plain Aluminium

Made from 20g aluminium. Two handy sizes, screws included.

100(D) x 58(H) x 45(W)mm	
Cat. HB-5100	\$4.95 10 up \$4.70

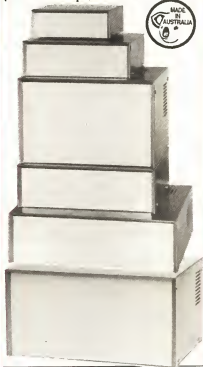
150(D) x 100(H) x 70(W)	
Cat. HB-5101	\$6.75 10 up \$6.50



Instrument Cases

Excellent range of cases made in Australia from heavy gauge aluminium and blue hammer finish steel. Ideal general purpose case at a reasonable price.

Cat. HB-5459	150(D) x 55(H) x 100(W)
\$11.95	10 up \$11.50 ea
Cat. HB-5460	200(D) x 80(H) x 130(W)
\$13.95	10 up \$13.50 ea
Cat. HB-5462	255(D) x 77(H) x 155(W)
\$16.95	10 up \$15.95 ea
Cat. HB-5464	255(D) x 153(H) x 155(W)
\$21.95	10 up \$20.50 ea
Cat. HB-5466	305(D) x 90(H) x 200(W)
\$21.95	10 up \$20.50 ea
Cat. HB-5468	150(D) x 200(H) x 305(W)
\$25.95	10 up \$24.50 ea



Metal Cases

As used in many popular magazine projects. Aluminium case finished in grey with black finish steel cover. Ventilated and supplied with rubber feet.

Cat. HB-5441	53(D) x 83(H) x 102(W)
\$6.25	10 up \$6.00 ea
Cat. HB-5442	150(D) x 61(H) x 102(W)
\$6.50	10 up \$6.25 ea
Cat. HB-5444	150(D) x 76(H) x 134(W)
\$7.50	10 up \$7.00 ea
Cat. HB-5446	184(D) x 70(H) x 160(W)
\$ 7.95	10 up \$10.50 ea



Horwood Instrument Cases

These quality cases are popular for housing amplifiers, power supplies, instruments - anywhere a medium to large, good looking case is needed.

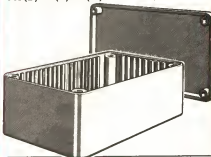
ALL CASES:	203(D) x 102(H)mm
	1 off 10+
Cat. HB-5472	153(W) \$30.95 \$28.50
Cat. HB-5473	213(W) \$32.95 \$30.95
Cat. HB-5474	254(W) \$34.95 \$32.95
Cat. HB-5475	314(W) \$39.95 \$37.50
Cat. HB-5476	401(W) \$44.50 \$42.50



Diecast Aluminium

These are the ideal housing for any project needing durability and excellent shielding. Popular for RF projects, musical projects and automotive projects.

Cat. HB-5000	100(D)x25(H)x52(W)
\$7.95	10+ \$7.65 ea
Cat. HB-5002	110(D)x30(H)x63(W)
\$8.50	10+ \$8.20 ea
Cat. HB-5004	122(D)x41(H)x67(W)
\$9.95	10+ \$9.50 ea
Cat. HB-5016	190(D)x60(H)x110(W)
\$22.95	
Cat. HB-5020	119(D)x53(H)x94(W)
\$13.95	



Aluminium

Compact, economical cases for similar uses to the Zippy boxes, but where shielding is required.

Cat. HB-5494	125(D)x40(H)x65(W)mm
\$5.75	10 up \$5.50 ea
Cat. HB-5495	150(D)x55(H)x95(W)mm
\$6.95	10 up \$6.50 ea



Jiffy Boxes - In ABS Plastic

What can we say about these famous boxes. Ideal for any small project needing a quality, economical case. Unique horizontal PCB "snap-in" mounts as well as vertical card guides. Order your PCB's pre-sized and dispense with costly stand-offs, screws, etc. These utility boxes are used in dozens of ETI, EA and Silicon Chip projects.

Beware of inferior so-called equivalents which are moulded in cheaper Styrene which can crack when drilled



Black With Plastic Lid

Cat. HB-6011	150x90x50	\$3.99	\$3.75
Cat. HB-6012	195x113x60	\$5.95	\$5.65
Cat. HB-6013	130x68x41	\$3.25	\$3.00
Cat. HB-6015	83x54x28	\$2.40	\$2.20

Grey With Plastic Lid

Cat. HB-6021	150x90x50	\$4.25	\$4.00
Cat. HB-6022	195x113x60	\$6.50	\$6.25
Cat. HB-6023	130x68x41	\$3.25	\$3.00
Cat. HB-6025	83x54x28	\$2.45	\$2.25

PCB board width

Size	Vert	Horizontal
150 x 80 x 50	90	87
195 x 113 x 60	106	103
130 x 68 x 41	62	60
83 x 54 x 28	50	47

Slope Front Metal Cabinets

Jaycar is proud to announce a range of three direct import, attractive powdercoate finish, slope front boxes, made of 18 gauge steel with large, non-slip rubber feet already mounted. These boxes are held together with countersunk screws and their excellent quality would complement any fine project.

SIZE 1: 150(W) x 103(D) x 70(rear height) x 35mm (front height)
Cat. HB-6080

\$11.95 10+ \$10.95 ea

SIZE 2: 200(W) x 150(D) x 70(rear height) x 35mm (front height)
Cat. HB-6081

\$14.95 10+ \$13.95 ea

SIZE 3: 265(W) x 200(D) x 82(rear height) x 32mm (front height)
Cat. HB-6082

\$18.95 10+ \$17.50 ea



Pro Quality Instrument Cases

Our superb instrument cases will give your projects the professional appearance they deserve.

- Internal mounting posts enable a wide combination of PCB's, transformers, etc., to be accommodated (screws supplied)
- PCB guide rails provided internally allow vertical PCB positioning to several locations
- Removable front and rear panels, attractive textured finish one side and plain the other. (Enables direct engraving, silk screen printing etc., to plain side)
- Top and bottom split apart for ease of construction or service. Integral feet included
- Great for test instruments and other high grade projects

NOW AVAILABLE IN 3 GREAT SIZES SMALL - NON VENTED
Overall size: 150(W) x 160(D) x 65(H)mm
Cat. HB-5913

\$12.95 10 up \$11.95 ea

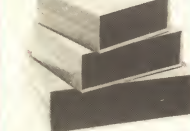
MEDIUM - NON VENTED
Overall size: 260(W) x 160(D) x 70(H)mm
Cat. HB-5912

\$14.95 10 up \$13.75

LARGE - VENTED CASE
Overall size: 260(W) x 190(D) x 80(H)mm
Cat. HB-5910

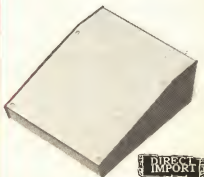
\$19.95 10 up \$18.50
Spare ABS plastic panel available
Cat. HB-5920

\$22.20 10+ \$19.95 ea



Console Box

Size: 170(W) x 214(D) x 32(HF) x 82(HR)mm
Cat. HB-6240
GREY **\$27.95 ea**

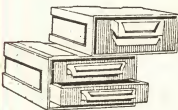


Interlocking Parts Drawers

Unique side and top/bottom keying system allows you to use just a few or build a whole wall of drawers as your parts expansion dictates. Quality designed drawer slides will not 'stick' or seize. Slide handles also takes identity cards. Single or double drawers available.

Size: 110(W) x 120(D) x 50(H)mm
Cat. HB-6300 SINGLE DRAWER
Cat. HB-6301 DOUBLE DRAWER

\$5.50 ea
10 or more \$5.10 each



Portable Parts Storage System

Utility Box

Ideal system for the serviceman, or mobile workshop, or just to keep all those resistors and capacitors tidy. Also ideal for fishing tackle and many other uses. Six of these utility boxes will fit snugly into the carry case pictured. Size of the utility box 188 x 115 x 36mm. Colour opaque white.

Cat. HB-6310

\$2.29

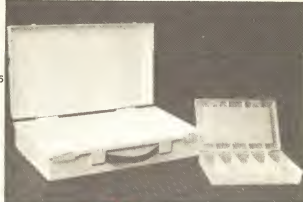
10+ \$2.10 ea

Utility Carry Case

Specifically designed to hold 6 boxes snugly to give a 30 compartment totally portable parts storage system.
Size 365 x 210 x 80mm.

Colour white.
Cat. HB-6312

\$17.95



Carry case and 6 utility boxes bought together for \$29.95 - Save \$1.74



Bug Boxes - Save on 1988 Prices

We are proud to announce a range of plastic anti-static enclosures basically for integrated circuits. It is in fact a system called "Bug Boxes". The Bug Box system is a complete storage/protection/identification and retrieval capability for, as we said, IC's, small other parts, such as screws, or even small tools!

The system is in fact completely modular. The user can purchase a single tray or establish a full blown storage and retrieval system from the modules described below. It is ideal for computer field service or in the lab for parts storage.

They are heavily injection moulded for long trouble free industrial use. Made in the USA.

Bug Box

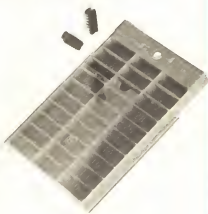
This is essentially a flat tray measuring 123(L) x 83(W) x 15(D)mm moulded in anti-static plastic with a clear locking plastic sliding cover. The cover has numbers marked on it that correspond to the compartments inside. It also has a unique patented feature which enables you to reveal one compartment per row without revealing the others and endangering their contents.

The Bug Box will hold 60 x 8 pin IC's or 30 x 14, 16, 18 or 20 pin IC's in its 30 separate compartments (each compartment measures 25.4(L) x 9.5(W) x 12.7(D)mm. The Bug Box tray is blue in colour and slides into the Bug Cage described elsewhere on this page.

Cat. HB-6350

\$4.95 each was \$5.95

10 or more \$4.45 each



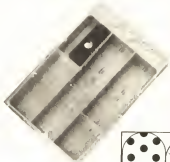
LSI Bug Box

Similar in principal to the HB-6350 except that it is meant to store larger IC's or resistors, caps, etc. Also anti-static. Same external dimensions but with 3 compartments 107(L) x 25.4(W) x 12.7(D)mm which run the length of the tray. Six vertical and six horizontal clear plastic dividers are included to further subdivide the compartments in whatever configuration the user requires. Colour blue with clear cover.

Cat. HB-6358

\$6.75 each was \$7.95

10 or more \$6.50 each



Bug Cage

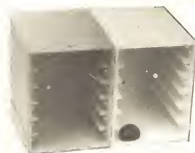
The heavy duty moulded cabinet accommodates up to 6 Bug Boxes. Once inserted each tray is spring loaded to stand proud of the front of the cabinet to allow easy removal between thumb and index finger. The cabinet also has tongue and groove dovetails to allow adjacent Bug Cages to interlock together to make a modular storage system.

Size: 128(H) x 100(W) x 131(D)mm

Cat. HB-6366

\$8.95 each was \$9.95

10 or more \$8.50 each



Bug Cage Cover

A snap in clear acrylic door that can clip on the HB-6366 Bug Cage. Holds all trays securely in place and enables the user to identify various trays without the need to open the cabinet. As the trays are spring mounted in the cage, the cover keeps them securely in place. The trays will not rattle when a Cage Cover is fitted and is therefore a definite requirement for mobile use.

Cat. HB-6370

\$5.95 each was \$6.95

10 or more \$5.65 each



Key-Fob style Burglar Alarm Transmitter Case

Now available our own direct import key fob case. Ideal for remote control car alarm kits. Size: 50 x 33 x 14mm. Supplied with switch and battery terminals.

Cat. HB-6072

\$3.95

10+ \$3.65 ea



Bulkhead Mount Plastic Case

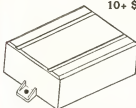
A unique clip together case that features moulded in mounting feet on the sides. Measures 87(L) x 67(W) x 31(D)mm. Ideal for car burglar alarms, etc. Black in colour.

A bargain at only \$2.00

Cat. HB-6075

\$2.00

10+ \$1.80 ea



Instrument Case

A proud addition to our range. This very attractive case is instrument blue in colour, made in ABS plastic, has removable front and rear panels, vented and looks extremely smart. Its along the same lines as our HB-5912 box, but not as high.

Measures: 180(W) x 230(D) x 40(H)mm. Accepts PCB vertically 170 x 34mm and horizontally 220 x 145mm.

Cat. HB-5915

\$18.95



Probe Case

We have finally sourced a quality probe. Grey in colour, it measures 200 x 24 mm, and is supplied complete with metal probe. These have been extremely hard to find recently. Ideal for kits.

Cat. HB-6400

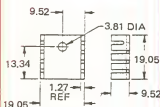
\$12.95



TO-220 Mini

This little heatsink is great for voltage regulators and flat pack transistors. Its small size ensures it will fit into the tightest places. Cat. HH-8502

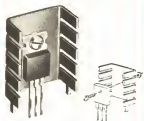
85¢ 10 up 75¢ ea



TO-220 Heatsink

A larger version of HH-8502. Ensures maximum dissipation where the mini TO-220 will not suffice. Cat. HH-8504

\$1.50 10 up \$1.35 ea



TO-18 Round Fan Type

High efficiency, feather weight press-on for maximum dissipation. Total diameter 16mm x 10mm high. Cat. HH-8505

65¢ 10 up 59¢ ea



TO-5 Round Fan Type

As TO-18 but suits TO-5 transistors. Total diameter 19mm x 5mm high. Cat. HH-8512

55¢ 10 up 45¢ ea



TO-220 Clip-on

The heatsink will just clip over a device when required for permanent or temporary installation. Cat. HH-8503

\$1.20

10 up \$1.10 ea



TO-220 Medium

A medium version for all flat pack devices. Measures 27mm x 25mm base and 34mm high. Used extensively on PC boards. Vertical flutes for maximum thermal efficiency. Cat. HH-8508

\$1.00 10 up 90¢ ea



IC Heatsink

Very handy heatsink. If you have an overheating IC. Measures 18.5mm long x 6mm wide x 5mm high. Heatsink has 7 fins. Cat. HH-8506

95¢ 10 up 80¢ ea

Universal "U" - Type

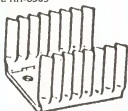
Universal hole pattern allows mounting of nearly every power transistor, as well as flat packs. Ideal for PCB mounting. 60mm long x 35mm wide with fins 30mm high. Cat. HH-8511

\$1.70 10 up \$1.50 ea



TO-3 Special

We have made a bulk purchase of TO-3 minifin heatsinks. Size 38mm x 38mm base x 26mm high. Cat. HH-8509



OEM's ASK FOR OUR GREAT QUANTITY PRICES

\$1.95

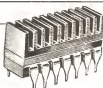
10 up \$1.75 ea

TO-3 Minifin

This heatsink gives incredible heat dissipation due to its unique fin design. It measures 50mm x 50mm by 25mm high. Drilled to suit TO-3 case. Cat. HH-8510



\$2.50 10 up \$2.25 ea



Versatile Heavy Duty

Extrusion is tapped and supplied with mounting screws. Allows horizontal and vertical mounting. Heatsink has tongue and grooved ends enabling "ganging" of heatsinks together.

UNDRILLED

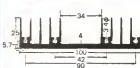
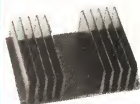
\$7.50

10 up \$7.15 each Cat. HH-8566

DRILLED 2 x TO-3

\$7.95

10 up \$7.60 each Cat. HH-8567



Economy Power

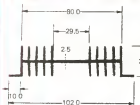
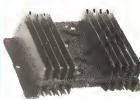
This unit has fins on both top and bottom. Available in both drilled and undrilled types. Accepts two of each type transistors TO-3, TO-126 and TO-220.

UNDRILLED **\$5.95**

10 up \$5.60 each Cat. HH-8560

DRILLED 2 x TO-3 **\$6.50**

10 up \$6.10 each Cat. HH-8561



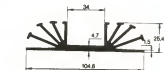
High Efficiency Fan Type

Due to its thick base and fan type fins these heatsinks can dissipate massive amounts of heat. Available in various lengths. 105mm wide

Cat. HH-8572
75mm long
10 up \$6.70 each **\$6.95**

Cat. HH-8574
225mm long
10 up \$19.25 each **\$19.95**

Cat. HH-8578
300mm long
10 up \$20.95 each **\$21.95**



DIRECT IMPORT

Super Heavy Duty

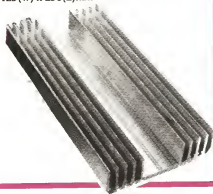
This is a black anodised heatsink section which is finned on one side and flat on the other. The extrusion cross section is 125mm wide and 36mm high. Unique recessed channels are incorporated into the flat side to accommodate screws, panels, heatsink brackets, etc.

AVAILABLE IN THREE LENGTHS

Cat. HH-8590
125(W) x 75(L)mm **\$ 9.50**

Vertical 2 unit rack
Cat. HH-8592
125(W) x 125(L)mm **\$13.95**

Vertical 3 unit rack
Cat. HH-8594
125(W) x 250(L)mm **\$20.95**



Die Cast

Jaycar is proud to announce a range of Made in Australia diecast heatsinks. They are gravity cast in aluminium, have the area where semiconductors mount, milled flat and are finally finished in powdercoat black. They are low cost for the performance offered. SIZE 134mmx 65mm (high) x length (see below)

8FNF SERIES

Cat. HH-8540
50mm long **\$5.95**

10 or more \$5.68 each

Cat. HH-8541
75mm long **\$8.95**

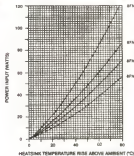
10 or more \$8.50 each

Cat. HH-8542
100mm long **\$10.50**

10 or more \$10.00 each

Cat. HH-8543
150mm long **\$12.95**

10 or more \$12.50 each

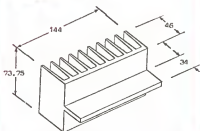


MF10-1F-75

74(H) x 144(L) x 46(W)mm (Bracket 34mm wide)

Cat. HH-8548
\$11.95 ea

10 or more \$11.50 each



MF-21-1F-75

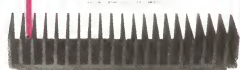
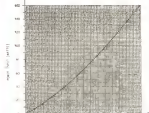
Long diecast featuring large H/S surface area in a low profile package.

Dimensions: 300(W) x 75(H) x 80(D)mm

Cat. HH-8554

\$22.95 ea

10 up \$21.95 each



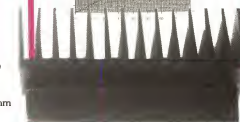
MF-14-1F-75

Similar to MF-21 but with deeper fins and not as long. Excellent for power amp 'bricks'. Size: 195(L) x 66(H)mm + bracket 34 x 76mm fin width

Cat. HH-8550

\$22.95 ea

10 up \$21.95 each



MF-14-2F-150

Double decker version of HH-8550. Enables you to mount 2 amplifier circuit boards on top of each other. Only occupies 6" of height. Size: 196(L) x 66(H)mm + bracket 34 x 150mm Fin width.

Cat. HH-8552

\$36.95 ea

10 up \$34.95 each



Plug-Pack Battery Eliminators

Don't throw your money away on batteries when one of these compact plug packs can power your calculator, transistor radio or cassette recorder, etc.

3, 4.5, 6, 7.5, 9, 12 V - 300mA DC

An extremely handy eliminator. Switchable output gives 6 different voltages. Terminates to a multiway connector.

Cat. MP-3010
Size: 47(W) x 50(H) x 50(D)mm

\$19.95



300mA DC Adaptors

If you only require one voltage you can save money by buying one of our new single voltage battery eliminators.

Size: 47(W) x 59(H) x 43(D)mm

6 VOLT 300mA

Cat. MP-3008

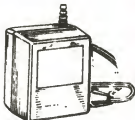
9 VOLT 300mA

Cat. MP-3007

12 VOLT 300mA

Cat. MP-3006

\$15.95 ea



6/9/12 Volt 500mA DC

Enough power to supply virtually anything up to a good sized cassette. Terminates in a multiway connector that will mate with virtually any DC input socket.

Cat. MP-3012

Size: 54(W) x 78(H) x 47(D)mm

\$22.50



13.8V DC 800mA Power Pack

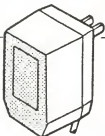
Specifically designed for burglar alarm control panels that don't need more than 800mA current.

For large alarm systems use MP-3018.

Cat. MP-3019

Size: 65(W) x 84(H) x 53(D)mm

\$32.95



6/7.5/9/12 Volt 1 Amp DC

Overload protected high current model. Suits continuous use intercoms, high current cassette recorders, toys, etc.

Screw terminations and mains cord and lead. Weight 60 grams

Cat. MP-3016

Size: 70(W) x 55(H) x 165(D)mm

\$34.95



12V DC 2 Amp Regulated Power Pack

Ideal for CB and workshop use where large amounts of power are required. DC connection via banana plug or screw terminals.

Cat. MP-3017

Size: 85(W) x 70(H) x 145(D)mm

\$69.95



Non Regulated 13.8V 2 Amp Power Supply

Especially designed for House Alarms. It will power the alarm as well as charge the standby Gel battery.

It will also power car radio/stereo and CB radios off the mains.

Cat. MP-3018

Size: 85(W) x 70(H) x 145(D)mm

\$49.95



12V AC 300mA Plug Pack

Ideal outboard supply for small projects. Eliminates hum problems caused by internal transformers - also much safer. As used in many magazine projects. Double insulated. Powers our AV-6501 Enhancer.

Cat. MP-3020

Size: 50(W) x 70(H) x 45(D)mm

\$14.95



16V AC 1.5 Amp Power Supply

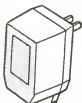
Designed for use with many house alarm panels, like our LA-5162 and LA-5168.

Supplied with three metres of cable for connection to alarm.

Cat. MP-3021

Size: 55(W) x 90(H) x 60(D)mm

\$29.50



Car Converter 12V - 6/7.5/9V @ 800mA

Plugs into a cigarette lighter socket to provide power to your portable radio or cassette. Multiway output suits most sockets.

Cat. MP-3014

\$16.50



Universal NiCad Battery Charger



FEATURES:

- Operates from 240V mains * Accepts AA, C, D & 9V NiCad's
- Charges singly or in groups * Charge different size batteries together *
- Charging indicator lamp at each battery position * Incorporates battery test facility

Cat. MB-3504

Size: 172(W) x 52(H) x 140(D)mm

\$34.95

Multi Function NiCad Charger

This one does everything!

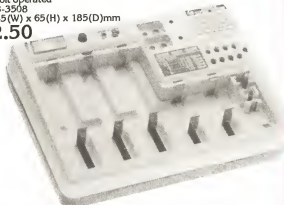
FEATURES

- Charges 8 - AAA, AA, C or D cells at once
- Charges 3 to 9 volt cells via universal connector
- Charges 3, 6 and 12 volt Gel batteries
- Charges button cells
- Test meter and LED charging
- 240 volt operated

Cat. MB-3508

Size: 245(W) x 65(H) x 185(D)mm

\$52.50

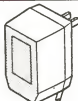


Gel Battery Charger

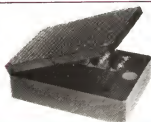
This handy charger will recharge your Gel batteries. Delivers 300mA current at 12 volts DC. Supplied with quick connect plugs for easy connection to the battery.

Cat. MP-3506

\$15.95



Solar Battery Charger



The solar panel in the lid will charge up to 4 x AA NiCads in a fairly short time. It is ideal for yachts, campers or anywhere where 240V is not available. It is NO DEARER than an ORDINARY NiCad charger but takes about the same time to charge in reasonable sunlight.

Cat. MB-3502

Size: 65(W) x 30(H) x 95(D)mm

\$14.95

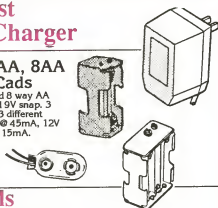
Low Cost NiCad Charger

Charges 4AA, 8AA and 9V NiCads

Supplied with 4 and 8 way AA battery holders and 9V snap. 3 way switch allows 3 different charging rates: 6V @ 45mA, 12V @ 45mA and 9V @ 15mA.

Cat. MB-3510

\$18.95



Toroidals

WHY A TOROID?

- Smaller size and weight to meet modern 'slimline' requirements
- Low electrically induced noise demanded by compact equipment
- High efficiency enabling conservative rating whilst maintaining size advantages
- Simple, quick, single bolt mounting

The Toroidal transformer is now accepted as the standard in the industry, overtaking the obsolete laminated type. Industry has been quick to recognise the advantage toroidals offer in size, weight and lower radiated field.

Current ratings on toroidal transformers.

- Can be used in 2 ways:-

- A) both secondary windings in series - higher volts
- B) both secondary windings in parallel - higher amps

160VA toroids

	Mode A	Mode B
Cat. MT-2112 12V	6.66 amps	13.33 amps
Cat. MT-2113 18V	4.44	8.88
Cat. MT-2114 25V	3.2	6.4
Cat. MT-2115 30V	2.66	5.33
Cat. MT-2116 35V	2.28	4.57
Cat. MT-2117 40V	2.0	4.0
Cat. MT-2118 45V	1.77	3.55

Size: 110 O/D x 50 I/D x 40(H)mm

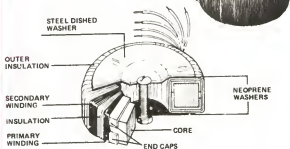
\$65.00 each

300VA toroids

	Mode A	Mode B
Cat. MT-2130 12V	12.5	25.0
Cat. MT-2132 18V	8.33	16.66
Cat. MT-2134 25V	6.0	12.0
Cat. MT-2136 30V	5.0	10.0
Cat. MT-2138 35V	4.28	8.57
Cat. MT-2140 40V	3.75	7.5
Cat. MT-2142 45V	3.33	6.66

Size: 125 O/D x 54 I/D x 55(H)mm

\$79.50 each



Electrical Characteristics		Iron Loss W	Copper Loss W	Reg %	Temp Rise °C
Secondary Power V.A	Primary No-load Current mA				
160	17	1.60	13.1	8.0	53
300	28	2.60	18.6	6.2	59

Toroidal to suit AEM 6000 Power Amplifier

50-0-50V 300VA

Cat. MT-2190

Size: 125 O/D x 54 I/D x 55(H)mm

\$79.95

12.6V CT @ 150mA

As used in many, many kits.
240V primary. Type 2851
Cat. MM-2006
Size: 40(W) x 38(H) x 28(D)mm
\$5.95 ea
10 up \$5.50 ea



15V CT @ 150mA

New to our range for 1989.
Extremely handy transformer for
power supplies and kits etc.
2855 type, 240V primary. As
used in Universal Power Supply
kit KC-5038.
Size 52mm (Mtn hole), 40mm
wide and 35mm high.
Cat. MM-2007

\$6.95
10 up \$6.50 each



6-15 Volt 1 A

This little beauty suits a
multitude of projects with its
wide range of voltages. This one
is fully approved by the A.E.E.
(unlike many similar models).
Voltage taps are at 6.3, 7.5, 8.5,
9.5, 12.6, & 15V.
(2155 type) 240V primary.
Cat. MM-2002
Size: 60(W) x 50(H) x 50(D)mm
\$10.95 ea
10 up \$10.25 ea



6-15 Volt 2 A

Voltage taps are 6, 9, 12 & 15
volts. Higher current for those
bigger jobs. (2156 type) 240V
primary.
Cat. MM-2004
Size: 68(W) x 54(H) x 70(D)mm
\$16.95 ea
10 up \$15.95 ea



15-30 Volt 1 Amp

Similar to the MM-2002 but with
higher voltage taps. Also fully
approved. Taps at 15, 17.5, 20,
24, 27.5 & 30 volts.
(6672 type) 240V primary.
Cat. MM-2008
Size: 68(W) x 58(H) x 58(D)mm
\$16.95 ea
10 up \$15.95 ea



Multipurpose Power Transformer

240V to 9, 12, 15, 18, 21, 24
volts at 60VA (60W). High grade
silicon steel laminations. Made
right here in Australia. Use of
high grade silicon steel has enabled
surprisingly compact dimensions.
240V primary.

Volts	Current	C/T
3	6.6A	No
6	6.6A	Yes
9	6.6A	Yes
12	5A	No
15	4A	No
18	3.3A	Yes
21	2.9A	No
24	2.5A	Yes

Cat. MM-2005
Size: 70(W) x 58(H) x 70(D)mm.

\$26.50 ea
10 up \$25.50 ea



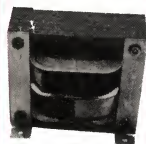
12 - 30 Volt High Current

Voltage taps are 12, 15, 24, 27
and 30 volts. 240V primary.
Secondary chart
Sec V Max A Terminals Joins
12 10A A,B A-D,B-E
15 8A A,C A-D,C-F
24 5A A,E B-D
27 4.4A A,E C-D
30 4A A,F C-D
Cat. MM-2009
\$39.95



18 Volt 6 Amp High Current

This heavy duty transformer is
ideal for CB and Amateur
computer power supplies and
battery charger use. Fly lead
terminations. 240V primary.
Cat. MM-2000
Size: 95(W) x 84(H) x 75(D)mm
\$37.95



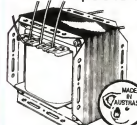
22/0/22 Volt 1.5 Amp

As used in the Playmaster
Twin 25 amplifier. Suits many
similar amps. 240V primary.
Cat. MM-2010 Type JT180
Size: 80(W) x 65(H) x
65(D)mm
\$24.95



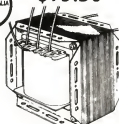
35/0/35V 2.5 Amp

4361 type as used in the
Playmaster MOSFET and ETI
5000 amps. This is the trans-
former recommended by EA for
this project. With copper strap to
reduce hum field dramatically.
Size 95 x 79 x 95mm. 240V
primary.
Cat. MM-2015 **\$69.50**



47/0/47 Volt 3 Amp

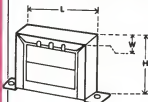
4363 type designed for really
high power use. Used in both the
EA and ETI 3000 watt modules.
Has 2 x 15V @ 500mA
windings to power preamps etc.
240V primary
Cat. MM-2017
Size: 110(W) x 85(H) x 95(D)mm



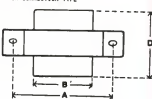
28/0/28 Volt 2 Amp

Standard E core model. Ideal for
power amplifiers. As used in the
ETI 400 power amplifier kits.
240V primary. Type PF3577/-
JT144
Cat. MF-1095 **\$33.95**

Dimension Guide



PIN CONNECTION TYPE



Cat. No	A	B	D	L	W	H
MM-2001	52	28	33	43	16	35
MM-2003	52	36	43	59	22	51
MM-2006	52	28	35	43	18	35
MM-2007	52	28	40	43	18	35
MM-2002	73	37	42	59	24	51
MM-2004	80	44	62	69	39	59
MM-2005	80	42	60	69	29	60
MM-2009	92	50	72	79	39	69
MM-2008	80	43	62	69	39	59

PC Mount 5VA

A series of ultra-compact PC mount transformers.

These are used in many popular projects. A range of voltage with corresponding current. All have two secondary windings which can be used to provide \pm supplies or connected in series to double the voltage, or parallel to double the current.

240V primary
Cat. MF-1000 2 x 4.5V @ 1.11A
Cat. MF-1002 2 x 6V @ 830mA
Cat. MF-1004 2 x 7.5V @ 670mA
Cat. MF-1006 2 x 9V @ 560mA
Cat. MF-1009 2 x 12V @ 420mA
Cat. MF-1012 2 x 15V @ 330mA
Cat. MF-1015 2 x 20V @ 250mA
Size: 55(W) x 35(H) x 40(D)mm

\$22.95 ea



PL20VA Flat Pack

These are low profile transformers suitable for many projects. Twin secondary gives maximum flexibility. Lower hum radiation than conventional types. 240V primary.

Cat. MF-1030 PL12/20VA
2 x 6V @ 1.67A
Cat. MF-1033 PL15/20VA
2 x 7.5V @ 1.33A
Cat. MF-1036 PL18/20VA
2 x 9V @ 1.11A
Cat. MF-1039 PL24/20VA
2 x 12V @ 830mA
Cat. MF-1042 PL30/20VA
2 x 15V @ 670mA
Cat. MF-1045 PL40/20VA
2 x 20V @ 500mA
Size: 85(W) x 40(H) x 60(D)mm

\$34.95 ea

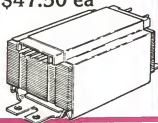


PL60VA

Higher profile. Low hum radiation and twin secondaries. 240V primary.

Cat. MF-1072 PL15/60VA
15V @ 4A
1 winding only
Cat. MF-1075 PL18/60VA
2 x 9V @ 3.33A
Cat. MF-1078 PL24/60VA
2 x 12V @ 2.5A
Cat. MF-1081 PL30/60VA
2 x 15V @ 2A
Cat. MF-1082 PL40/60VA
2 x 20V @ 1.5A
Size: 85(W) x 53(H) x 60(D)mm

\$47.50 ea

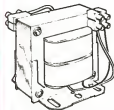


240-115V 125VA Stepdown Transformer



Ferguson brand. Wire straight into screw terminals provided. 240 volts in one side and 115 volts out the other. For safety we recommend you mount it in an enclosure. Will deliver up to 1.09 amps, 125 watts into a resistive load.

Cat. MF-1092
Size: 96(W) x 80(H) x 75(D)mm
\$87.50



C-Core - used in amplifier 60/60 - JT353

This is a superb piece of engineering. Basically it is a dual diagonally wound power transformer. This winding technique greatly reduces stray hum fields - similar to a toroid. The advantage is that slightly more power can be extracted from the same space that a toroid of similar ratings would occupy. Supplied with mounting bracket.

Primary 240V
Secondary 30-0-35V @ 2A
30-0-15V @ 0.25A
Cat. MM-2020
Size: 95(W) x 76(H) x 95(D)mm

\$79.50

Speaker Line Transformer

For use with 70V or 100V speaker lines (in outdoor PA's etc.). Primary 2.5/5k, secondary 2, 4, 8 & 16 ohm. 4 watts rms power rating.

Cat. MM-2001
Size: 43(W) x 35(H) x 35(D)mm

\$6.95

10 up \$6.50 ea



Low Cost Line Input Transformer

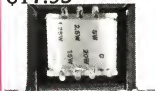
Max input level +12dBm. Ideal input coupling transformer enables DC isolation of various modules therefore preventing hum pick-up etc.

Wide frequency response: 30Hz to 30kHz
Nominal impedance ratio 10k:10k 1:1
Ideal for coupling from 600 ohm lines to amplifier input stages etc.
Cat. MT-4705
Size: 32 x 30 x 27(D)mm
\$7.50 ea
10 up \$6.90 ea



20 Watt Line

Primary power taps (100V line) 1.25/2.5/5/10/15/20W (halve these for 70V lines).
Secondary taps 4/8/16 ohms
Cat. MT-2003
Size: 59(W) x 50(H) x 45(D)mm
\$17.95



Miniature Transformers

OUTPUT

- Primary/secondary 500 ct/8 ohms
- Iron core
- Size 15 x 11 x 14(D)mm
- 450mW rating
- Cat. MM-2530

\$2.50 ea

10 up \$2.25 ea

OUTPUT

- Primary/secondary 1k ct/8 ohms
- Ferrite core
- Size 15 x 14 x 11(H)mm
- 350mW rating
- Cat. MM-2532

\$1.95 ea

10 up \$1.85 ea

COUPLING

- 3k/3k
- Iron core
- Size 16 x 15 x 15(D)mm
- Cat. MM-2534

\$1.95 ea

10 up \$1.85 ea



Balanced Microphone Transformer

Mu-metal shielded can, bush mounting. 200 ohm ct primary/secondary. 10k ohm primary/secondary. Can be used either way round. Used for PA mixers, disco's etc., where low hum mic input is needed.
Cat. MT-4710
Size: 30(H) x 15mm dia.
\$28.95

Bridging/ Isolating Transformer

Mu-metal shielded can. Used for coupling audio modules - prevents earth loops, hum, etc. Essential coupling device where DC isolation is required. Nominal impedance ratio 10k:10k (1:1).
Cat. MT-4720
Size: 30(H) x 15mm dia.
\$28.95



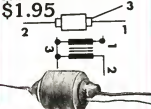
600/600 Ohm Transformer

Specially designed for connecting electronic circuits to Telecom lines. High dielectric insulation. PCB mounting, will handle quite substantial signals without saturation. Telecom approved.
Cat. MA-1510
Size: 36(W) x 36(H) x 36(D)mm
\$19.95



Strobe Trigger

As used in the ETI Strobe kit or for general hobbyist projects.
Cat. MM-2520
Size: 10mm x 7mm dia.
\$1.95



Squeaky Clean Mains Filters

PROTECTION FOR: MICROPROCESSORS, TERMINALS, MICRO COMPUTERS, PRINTERS, DISK DRIVES AND TELEMETRY EQUIPMENT
Used by Government Departments, Schools, Universities, Banks and TV Stations

Most modern personal computers and peripheral equipment are fitted with basic type filtering components. In most instances this protection offers only minimal protection and is not capable of handling many mains supply problems.

The problems facing the personal computer user includes high levels of RF (radio frequency) interference, voltage spikes and FM modulation. The supply authority actually superimposes a range of frequencies from 1kHz to over many MHz for the control of hot water systems, and other industrial remote control services. Additionally both industrial and domestic motors turning on and off can induce large spikes into the mains supply.

For you to ensure maximum safeguard to both your hardware and software against RF noise, control tones and voltage spikes the equipment should be pre-filtered by a SQUEEKY CLEAN MAINS FILTER.

Many unexplained errors, programme corruption and general inconvenience are eliminated by a Squeaky Clean.

SPECIFICATIONS:
Approval No's: N10716/N10717
Load Rating: Cont 10 amps, with circuit breaker at 240VAC
Clamping Voltage: 280V peak or 275V rms
Peak Impulse Current: 2000A (8 x 12u); 2 outlet (8 x 20u)
Protection Modes: Active-Neutral
Earth Leakage: Will not trip a 20mA Earth Leakage breaker
Cable Length: 1 metre (approx)

4 OUTLET Cat. MS-4020
\$269

2 OUTLET Cat. MS-4025
\$99



IEC-Type Mains Input Filter

This high quality filter is basically a metal box with soldered on lid. On one side is an IEC-320 type recessed chassis plug. The box mounts on the inside of a cabinet with an appropriate hole for the IEC connector and two mounting screws. The filter is rated at 240V 3 amps 1/4" Q.C. type terminals are on the top for simple internal mains connection.

SPECS
Input: 115-250V AC
47 - 63Hz
3 amp (continuous)
65(D) x 45(H)
excluding terminals
x 53(W)mm

Very high quality.
Cat. MS-4004
\$19.95 ea

10 up \$17.95 ea
(OEM's check us for bulk prices)

MADE IN THE USA



6 Way Power Outlet With Mains Filter

Not only is it a 6 way power board, it incorporates a voltage surge and spike protector and noise rejection filter network. Supplied with two metre cord and mains plug, safety shutters on each outlet, illuminated master on/off and even a safety circuit breaker.

NOTE: If you require absolute mains suppression don't forget the Squeaky Clean Mains Filter shown on the left.

Cat. MS-4030
\$64.95



PCB Mains Filter

European Made

Another scoop purchase. This time a quality, high performance 4 amp 240V PCB mount mains filter. The schematic and pinout of the filter is printed on the top of the 45(L) x 28(W) x 16.5(H)mm potted plastic case. The unit has all of the major electricity authority approvals (German, US, Canadian, etc) marked on it as well. It has twin series chokes (2 x 1mH) MKT and MKP quality mains caps as shunts. As a filter it is very effective.

This product sells to OEM's in 000's for about \$19. Due to the enormous loss that the distressed manufacturer made when selling the goods to us you will pay almost half this one off!

The quantity is limited. OEM's - we can supply this to you at a great price - call us now!
Cat. MS-4008
\$9.95
10+ \$8.95 ea

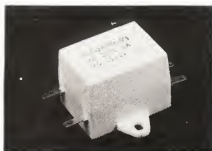


Economical Mains Filter

250V AC @ 3A
Insertion loss line to line 20dB 0.8 - 30MHz. Line to ground 30dB 0.7 - 30MHz. Ideal filter for computers, amps, etc. Quick connect lugs. D.O.T. approved.

Cat. MS-4002
Size: 35(W) x 28(H) x 27(D)mm

\$26.50



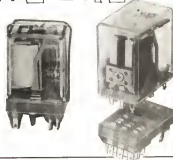
Cradle Relays

Cat No	Coil Volts	Coil Ohms	Contact Set	Contact Amps Max.	Contact Power Max.
SY-4016	12	325	DPDT	2A	120VA
SY-4009	12	170	4PDT	1A	60VA
SY-4015	48		6PDT	1A	60VA

Sizes: SY-4016 29 x 17 x 30(H)mm
SY-4009 29 x 18 x 30(H)mm
SY-4015 30 x 25 x 32(H)mm

Prices:	Cat. No	1-9	10+
	SY-4016	\$ 7.50	\$ 7.00
	SY-4009	\$12.50	\$11.50
	SY-4015	\$ 2.95	\$ 2.50

TERMINAL ARRANGEMENT (Bottom View)



Cradle Relay Sockets

Cat. SY-4002	
2 changeover (DPDT)	\$1.50 10 + \$1.25
Cat. SY-4004	
4 changeover (4DPT)	\$2.50 10 + \$2.20



Thermal/Magnetic 0.5 Amp Circuit Breaker

QUALITY MADE E-T-A GERMAN MAKE
Single pole plunger type,
240V AC or 65V DC

Will interrupt when current exceeds 0.5 amp. Has thermal overload (slow current increase) and magnetic overload (fast current increase) for double circuit protection. Has 2 aux contacts (NO & NC) to trigger remote alarms if necessary. Size 60(L) inc. pushbuttons x 42 x 6mm
Cat. SC-2280



\$4.50 ea

10 or more \$4.00 ea

Horn Relay

Whilst designed for auto horns, this relay is ideal for any high current application i.e. burglar alarms, ignition cutout, transmitters, etc. - as well as for horns! SPST contacts.

Contact Current (max)	20A
Contact Voltage (nom)	12V
Nominal Coil Voltage	12V
Cat. SY-4068	



\$6.75 ea

10 or more
\$6.50 ea

"Octal" (Industrial Type)

12 volt coil 10 amp DPDT contacts. OEM quality. Heavy duty relay. Ideal for power supply and control circuit switch. Size: 54(H) x 35 x 35mm
Cat. SY-4020

\$15.95 ea

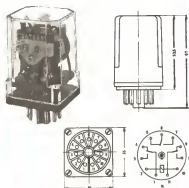
10 or more \$15.50 each

RELAY SOCKET TO SUIT

Screw down type with screw terminals.
Cat. SY-4021

\$6.95 ea

10 or more \$6.50 each

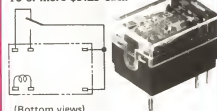


DIL IC Socket Mount

Extra low profile 11(H) x 16(W) x 11(D)mm
5V DC bobbin. 1A contact rating. 56 ohm coil resistance. SPDT. 0.5 amp at 120V AC
Cat. SY-4058

\$5.50 ea

10 or more \$5.25 each



(Bottom views)

Double Pole Lamp Relay

DPST contacts - each rated at 30 amps! Ideal for Quartz iodine driving lamps or any high current switching application. Contacts can be paralleled for a 12V 60 amp rating.

Contact Current (max)	2 x 30A
Contact Voltage (nom)	12V
Nominal Coil Voltage	12V

Cat. SY-4070

ONLY \$16.95 ea

10 or more
\$16.00 ea



Mini PCB Relays

SPDT Mini

12V DC bobbin, 1 amp (conservative) contact rating. Fully sealed unit measuring: 23(H) x 20(W) x 15(D)mm
Cat. SY-4060

\$2.95 ea

10 or more \$2.75 ea

DPDT Mini

12V DC bobbin, 1 amp contact rating.
Size: 21 x 16 x 17(H)mm
Cat. SY-4061

\$4.75 ea

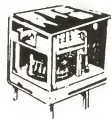
10 or more \$4.50 ea

Mini PCB Relay - Heavy Duty SPDT

12V DC bobbin, 3 amp contact rating
Size: 21 x 16 x 17(H)mm
Cat. SY-4066

\$3.75 ea

10 or more \$3.50 ea



Special PC Mount

Elegant relays. PCB mounting featuring silver alloy contacts

SPDT 12V DC. Coil 285 ohms. 10A @ 30V DC or 10A @ 240V AC contact rating.
Cat. SY-4050

\$7.95 ea

10 up \$7.20 ea

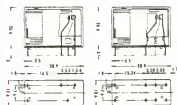


DPDT 12V DC. Coil 285 ohms. 2 x 5A @ 30V DC or 2 x 5A @ 240V AC contact rating

Size: 29 x 12 x 26(H)mm
Cat. SY-4052

\$9.95 ea

10 up \$9.20 ea



Power Relay

Where really heavy currents need to be switched for large mains appliances, high power speakers.

Rated at 10A 240V AC.
Coil 12V 160 ohms.
DPDT contacts.
Size: 27 x 20 x 35(H)mm
Cat. SY-4065

\$12.50 ea

10 or more \$12.00 ea



Brushed Aluminium

The following three knobs have a high quality brushed aluminium finish, an engraved pointer and very attractive appearance, making them suitable for hi-fi projects or wherever a great appearance is required.

Cat. HK-7020 16 dia x 14mm H

\$1.85 each

10 up \$1.70 each

Cat. HK-7022 22 dia x 14mm H

\$2.10 each

10 up \$1.95 each

Cat. HK-7024

28 dia x 14mm H

\$2.85 each

10 up \$2.60 each



Polished Aluminium

18mm diameter

Cat. HK-7030

\$1.75 ea

10 up \$1.65 each

With flange.

Base diameter 20mm,

top diameter 14mm

height 20mm

Cat. HK-7040

\$1.95 ea

10 up \$1.80 each

Aluminium base flange with black top section - a very classy looking knob.

Base diameter 21mm,

top diameter 17mm

height 16mm

Cat. HK-7045

\$2.50 ea

10 up \$2.30 each



Black Plastic

ALUMINIUM INSERT
2 SIZES

Cat. HK-7756 32 dia x 17mm H

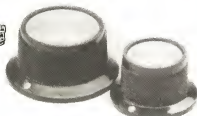
\$1.45 ea

10 up \$1.30 ea

Cat. HK-7754 24mm dia

\$1.35 ea

10 up \$1.20 ea



Black Anodised

Anodised knobs that look a million dollars and will make your project look the same.

Cat. HK-7013

29 dia x 21mm H

\$2.95 ea

10 up \$2.75 ea

Cat. HK-7015

40 dia x 25mm H

\$3.95 ea

10 up \$3.60 ea

Note: HK-7013 & 7015 are matching

Cat. HK-7010

22 dia x 14mm H

\$2.40 ea

10 up \$2.20 ea



Black Plastic

ALUMINIUM INSERT

Ideal for projects. Aluminium

insert in top, easy to see pointer

Cat. HK-7786 20 dia x 18mm H

\$1.40 ea

10 up \$1.25 ea



Black Plastic

WITH POINTER

The old favourite, as supplied in countless kits.

Cat. HK-7787 23 dia x 14mm H

\$1.25 ea

10 up \$1.15 ea



Skirt with Number 1-10

Cat. HK-7788 29mm dia

\$1.85 ea

10 up

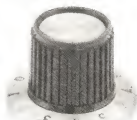
\$1.70 ea

Cat. HK-7549 36mm dia

\$1.95 ea

10 up

\$1.80 ea



TURN YOUR SURPLUS STOCK INTO CASH!!
Jaycar will purchase your surplus stocks of components and equipment.

We are continually on the lookout for sources of prime quality merchandise.

CALL GARY JOHNSTON OR BRUCE ROUTLEY NOW ON
(02) 747 2022

Matching Equipment Style

A new range of plastic knobs with 1/4" shaft grub screw fixing. Modern fluted style with slot for pointer and small skirt. 4 matching sizes.

Cat. HK-7760 12 dia x 12mm H

\$1.00 ea

10 up 90¢ ea

Cat. HK-7762 20 dia x 16mm H

\$1.30 ea

10 up \$1.20 ea

Cat. HK-7764 24 dia x 20mm H

\$1.40 ea

10 up \$1.30 ea

Cat. HK-7766 35 dia x 19mm H

\$1.65 ea

10 up \$1.50 ea



Cliff PushOn

These are amazing knobs, just push on to a standard 0.25" (1/4") shaft. No more messy screws. They are great for mixers, amplifiers, etc., where uniform size knobs are required, but need to be different at a glance. These knobs are used on some of our higher priced kits. Complete with coloured cap. Made in England. 20mm diameter x 18mm high.

Cat. HK-7705	Red	Cat. HK-7713	Yellow
Cat. HK-7707	Black	Cat. HK-7715	White
Cat. HK-7709	Blue	Cat. HK-7717	Grey
Cat. HK-7711	Green		

ALL ONE PRICE

\$1.25 ea

10 up \$1.10 ea



Schadow Switch Knob

These are used on those pushbutton switch banks, as well as the Schadow push on/off switches. They have a square hole to accept shaft. 10mm diameter x 15mm high. Black in colour with silver top cap.

Cat. HK-7791

50¢ ea

10 up 45¢ ea



Slider Pot Knobs

Jaycar increases their range of these rare slider pot knobs. Five different ones in all.

Style 1 and 2

Quality Cliff slider knobs to match their rotary knobs. Supplied with a white line down the centre and "fingerrip" styling.

Size: 23 x 11 x 10mm high. Black in colour.

0.3mm shaft width

Cat. HK-7718

\$1.25 ea

10 or more \$1.10 ea

6mm shaft width

Cat. HK-7720

\$1.25 ea

10 or more \$1.10 ea



Style 3

Black body with white border on top and white pointer line down one side. Accepts 6mm shaft width.

Size: (at base) 17 x 13mm and 13mm high.

Cat. HK-7725

95¢ ea

10 or more 85¢ ea



Style 4

Chrome body with single black line across centre of knob. This is the most conventional style slider pot.

Accepts 3mm wide shafts.

Size Base: 15 x 9mm x 12mm high

Cat. HK-7728

95¢ ea

10 or more 85¢ ea



Style 5

Chrome body with rounded corners. No marker line.

Size: 17(L) x 10 x 12mm high

Cat. HK-7730

95¢ ea

10 or more 85¢ ea



Plastic Tit

A soft vinyl boot measuring approximately 3mm dia x 9mm long with a 2mm dia hole. The boot will slide over the activator of a miniature toggle switch or over the activator of a slide pot. As used on graphic equalisers.

White in colour.

Supplied in a pack of 10

Cat. HK-7790

\$2.00



Non School/Non Government Accounts

Manufacturers! Open an account with Jaycar! Now large regular clients (not only manufacturers) can buy from Jaycar on account, under certain conditions.

Find out more by calling in to any Jaycar store or call

(02) 747 2022

or send us a

Fax **(02) 744 0767** - or write!

We will send you an account application form by return. It's that simple!

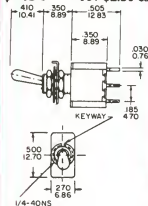
Mini Toggle

6mm mounting hole
Rating 2A 250V AC

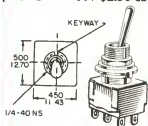


SPDT
Cat. ST-0550
\$1.95 10+ \$1.85 ea

SPDT Centre Off
Cat. ST-0558
\$2.50 10+ \$2.30 ea



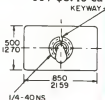
DPDT
Cat. ST-0552
\$2.35 10+ \$2.20 ea
DPDT Centre Off
Cat. ST-0560
\$2.75 10+ \$2.50 ea



3PDT
Cat. ST-0505
\$6.25 10+ \$6.00 ea



4PDT
Cat. ST-0506
\$6.75 10+ \$6.40 ea

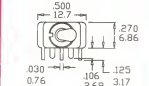
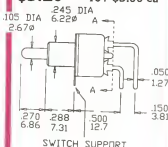


PCB Mount Mini Toggle

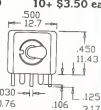
Rated 2A 250V AC



SPDT PC Mount
Cat. ST-0562
\$3.20 10+ \$3.00 ea



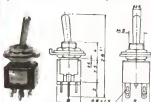
DPDT PC Mount
Cat. ST-0565
\$3.50 10+ \$3.25 ea
DPDT PC Mount Centre Off
Cat. ST-0566
\$3.75 10+ \$3.50 ea



Ultra Mini Toggle Switches

Ultra small size. Body only 8mm x 9mm (DP version) and 8mm x 5mm (SP version). Rated at 3A 125V.

SPDT Cat. ST-0540
\$2.20 10+ \$2.00 ea
DPDT Cat. ST-0542
\$2.60 10+ \$2.40 ea



Flattened Black Mini Toggle

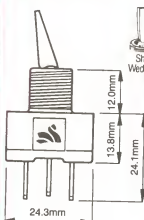
Quality mini switches with black flattened actuator. Rated at 6A 125V. Available in a single and a double pole style.

SPDT Cat. ST-0546
\$3.25 10+ \$3.00 ea
DPDT Cat. ST-0547
\$3.75 10+ \$3.50 ea



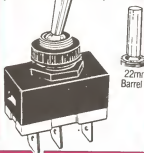
240V 10A Toggle Switches

Swann series 475 with spade lug connections. SPST. Panel hole 12mm.



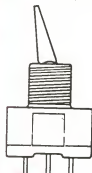
Type 1. Actuator is a short wedge type 12mm long. Black Cat. ST-0590
\$2.95 10+ \$2.65 ea

Type 2. Actuator is a chrome barrel type 22mm long. Very classy. Cat. ST-0592
\$3.95 10+ \$3.60 ea



240V 3A Toggle Switches

Quality MSP brand. Panel hole 12mm. Solder terminals
TYPE 1. SPDT actuator is a medium wedge type 15mm long. Black switch, black actuator. Cat. ST-0594
\$2.95 10+ \$2.65 ea
TYPE 2. SPDT momentary spring return. Medium flat actuator 15mm long - red in colour. Switch body black Cat. ST-0595
\$1.95 10+ \$1.75 ea



Standard Toggle

Chrome toggle, on/off indicator plate. Suitable for hobbyist and auto use.

SPST
Cat. ST-0570
Body size 26 x 14mm, clearance 20.5mm, mounting hole 12mm
\$1.65 10+ \$1.55 ea

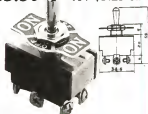
DPDT
Cat. ST-0572
Body size 29.5 x 18mm, clearance 23mm, mounting hole 12mm.
\$2.35 10+ \$2.20 ea



Heavy Duty Centre Off

Huge 10A 125V rating, chrome toggle with on/off indicator plate. DPDT centre off. Body size 35 x 20mm, clearance 26mm, mounting hole 12mm. Cat. ST-0576

\$3.50 10+ \$3.25 ea



Snap Action Keyboard Switches

PCB Mount, double pole. Suitable for keyboards, security systems, etc. 5 colours. These switches are normally open DPST. When the button is depressed the switch closes, but only while the button is held down.

Cat. SP-0720 Red
Cat. SP-0721 Black
Cat. SP-0722 Yellow
Cat. SP-0723 White
Cat. SP-0724 Green

\$1.10 ea

10+ \$1.00 ea



Miniature Pushbutton

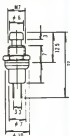
6mm mounting hole. 125V 3 amp rating. Momentary action. Cat. SP-0710 Push-on red button

90¢ ea 10+ 85¢ ea

Cat. SP-0711 Push-on Black button

90¢ ea 10+ 85¢ ea

Cat. SP-0726 Push-off 10+ \$1.30 ea



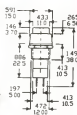
Pushbutton

Rated 3A 125V AC
Push-on Momentary SPST
Cat. SP-0716

\$2.10 10+ \$1.90 ea

Push-on/Push-off SPST
Cat. SP-0718

\$2.10 10+ \$1.90 ea



Double Pole Pushbutton

Rated 3A 125V AC

Alternate action DPDT

Cat. SP-0712

\$5.50 10+ \$5.30 ea

Alternate action SPDT

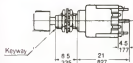
Cat. SP-0713

\$2.85 10+ \$2.60 ea

Momentary action DPDT

Cat. SP-0714

\$6.50 10+ \$6.25 ea



Pushbutton Switch

Quality Japanese made DPDT push on/push off switch rated at 125V 3 amp. Complete with black round knob. These are commonly used as on/off power switches for mains products, and normally cost about \$4 - \$5. Jaycar has a quantity available for only \$1.95

Cat. SP-0730

\$1.95 10+ \$1.75 ea

Knobs available separately

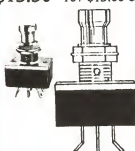
Cat. HK-7791 50¢ ea



Heavy Duty Footswitch

Ideal for fuzzboxes, or anywhere a heavy duty pushbutton switch is required. 250V 6A. Hole size 12mm. Size 29 x 18 x 24(D)mm. Cat. SM-1010

\$13.50 10+ \$13.00 ea



12 Volt Illuminated Push On/Off

Similar to the one used in the Red Light Car Alarms and in our Flasher Deterrent kit (see kit section)

RED

YELLOW

Replacement globe Cat. SL-2635

\$4.50

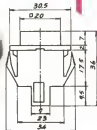
\$15.95



12 Volt Illuminated Pushbutton

Economy push on/push off with large RED (20 x 20mm) actuator with a chrome surround. Perfect for fake car burglar alarms. Rated 12V 10 amp 3 pole. Cat. SP-0745

\$6.95



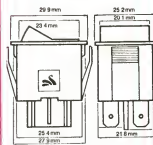
Illuminated 240V Rocker Switch

Swan series 51 type. DPDT 240V 15 amp illuminated with spade lug connections. Panel cut out 28.6mm x 22.3mm.

RED as used in ET15000 power amp

Cat. SK-0982

\$4.95 ea 10+ \$4.50 ea



Mains Rated Rocker Switches

Two very classy mains rocker switches. These are smaller than normal rockers and are perfect for amplifiers, etc. The illuminated version is supplied in our Playmaster 60/60 amplifier kit. Size: 21 x 19.5mm. Panel cut out size 13 x 19.5mm.

TYPE 1

SPST 5A Black actuator

Cat. SK-0984

\$2.50 10+ \$2.25 ea

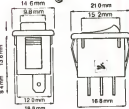
TYPE 2

ILLUMINATED ACTUATOR SPDT

8A 240V

Cat. SK-0985

\$3.95 10+ \$3.50 ea



Bedlamp Switch

240V 3 amp rating.

Single pole.

Cat. SP-0736

\$1.50 10+ \$1.40 ea

Double pole

Cat. SP-0738

\$2.25 10+ \$2.05 ea

Push on momentary 250V 1A

Made in England

SPST

Cat. SP-0734

\$1.20 10+ \$1.00 ea



Sealed PCB Rotary Switches

These switches have a removable ring with tab which can be inserted into the switch several ways to your particular requirements. For example, if you purchased a 1 pole x 12 way (max) switch you could convert it to, say, 1 pole 7 way between stops. They have a standard 1/4" shaft.



1 POLE

Configured from 1 pole 2 position through to 1 pole 12 position.
Cat. SR-1210

2 POLE

From 2 pole 2 position to 2 pole 6 position
Cat. SR-1212

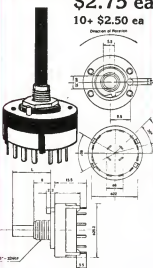
3 POLE

From 3 pole 2 position to 3 pole 4 position
Cat. SR-1214

4 POLE

4 pole, 2 and 3 position
Cat. SR-1216

\$2.75 ea
10+ \$2.50 ea



Mains Rotary

240V 3 amp DPST with 1/4" shaft. Size 27 x 16 x 16(D)mm. Cutout hole 12mm.

Cat. SR-1280

\$2.95 ea

10+ \$2.75 ea



Rocker Switches

DPDT black actuator. Size 22(L) x 13(W)mm. Mounting holes 36mm apart.
Cat. SK-0975

90¢ 10+ 80¢ ea

SPST version with black plastic mounting bracket, instead of metal (pictured). Size 44(L) x 15.5(W)mm. Mounting holes 35mm apart. Panel cutout 29 x 16mm. MSP brand 250V AC 3 amp.

Cat. SK-0988

95¢ 10+ 85¢ ea



Footswitch

This is a quality footswitch. It's mounted in a heavy metal case with a non-scratch base, and a non-slip top. Supplied with approx. 1 metre shielded cable terminated in a 3.5mm plug for switch contacts. Switch action is momentary. Switch itself is a quality microswitch, so will not accept high voltage or current.

Made in Japan.

Cat. SM-1015

\$12.50



Microswitch

SPDT 240V at 1.5 amp. Size 29 x 10mm x 11(H)mm (body only). Supplied with actuator 60mm long which can be removed.

Cat. SM-1040

\$2.95 10+ \$2.75 ea



DIL Switches

Dual in-line (fits in IC socket), self wiping contacts.

4 WAY (8 pin DIL pkg)

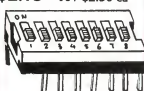
Cat. SM-1020

\$2.20 10+ \$2.10 ea

8 WAY (16 pin DIL pkg)

Cat. SM-1024

\$2.75 10+ \$2.50 ea



Mini Reed Switch

NORMALLY OPEN

Cat. SM-1002

\$1.60 10+ \$1.50 ea

REED COIL TO SUIT

Cat. SM-1004

\$1.60 10+ \$1.50 ea



Mercury Switch

Glass encapsulated 125V 3 amp AC.

Cat. SM-1035

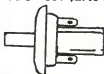
\$2.25 10+ \$2.05 ea



Alarm Tamper Switch

Full details alarm section.
Cat. LA-5066

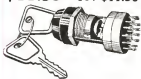
\$2.60 10+ \$2.40 ea



Barrel Key Switch

For high security installations. 4 pole 2 position.
Cat. SM-1033

\$11.95 10+ \$11.50 ea



Barrel Key Switch Cam Lock

Made from zinc die cast. Used in Alarms, petty cash boxes, etc.

Cat. SM-1029

\$6.95



Keyswitch Standard

Solid barrel type. 19.5mm mounting hole. SPST action. Supplied with two (2) keys.

Cat. SM-1030

\$8.50

10+ \$8.00 ea



Barrel Key Switch

Can be used in your telephone to stop unauthorised calls. Rated at 3 amp, 2 keys supplied.

Cat. SM-1027

\$10.95
10+ \$9.95 ea



Alarm Tamper Switch

Full details alarm section.
Cat. LE-8775

\$1.65 10+ \$1.50 ea

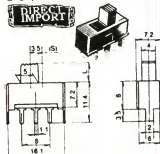


Slide Switches

Jaycar new series slide switches have silver plated contacts, contact ratings of 0.3A @ 100V minimum, 25 milli-ohm contact resistance, 100 Meg plus insulation resistance (at 500V DC) and will endure about 10,000 cycles before they clag out.

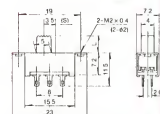
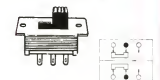
Sub-miniature DPDT (PCB mount)
Cat. SS-0823

90¢ 10+ 80¢ ea



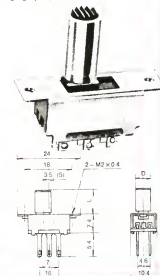
Sub-miniature DPDT (Panel Mount) Break before make (non shorting contacts)
Cat. SS-0852

60¢ 10+ 55¢ ea



Sub-miniature DPDT (Spun aluminium actuator) Panel mount.
Cat. SS-0812

90¢ 10+ 80¢ ea



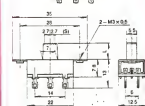
Quality SPDT.
Switch length 23mm. Width 10mm.
Cat. SS-0822

50¢ 10+ 40¢ ea



Miniature DPDT (Panel mount)
Cat. SS-0821

90¢ 10+ 80¢ ea



SPST slide switch.
Length 35mm. Width 10mm.
Cat. SS-0820
SPECIAL

60¢ 10+ 50¢ ea



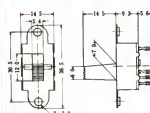
DPST Larger style slide switch.
Length 35mm. Width 16mm.
Cat. SS-0825
SPECIAL

80¢ 10+ 70¢ ea



Miniature 3PDT (Panel Mount)
Cat. SS-0833

\$2.50 10+ \$2.25 ea



Miniature 4PDT (Panel Mount)
Cat. SS-0850

\$1.50 10+ \$1.40 ea



Mains Rated Slider Switch

This is a large slider style switch SPST. Length 43mm. Width 16mm. Panel cutout 28 x 16mm. Rated at 250V 3 amp. Made in Australia by MSP. Black in colour with large sliding style actuator.
Cat. SS-0858

95¢

10+ 75¢ ea



Switch Nomenclature

We all know that there are dozens of different types of switches such as: toggles, rocker, slide, pushbutton, rotary, paddle, limit, knife, etc.

What does confuse some people is naming the configuration of the switch. It is basic to a good understanding of electronics to know the different switch configurations off by heart. The two main things to understand are the terms 'pole' and 'throw'.

Pole basically means the same as unique circuit. Each pole of a switch means that a circuit can be switched. Isolated electrically from any other pole that same switch may have. Throw basically means the switch is actuated does or does not another PART of the pole come in to the circuit.

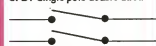
Single pole, single throw (abbreviated SPST) is the simplest type of ON/OFF switch.

The drawings and diagrams below show circuit configurations of switches. A rotary switch (not shown) may have only one pole but many throws i.e. 1 pole 12 way (or throws) switch can switch one circuit in 12 different directions. Incidentally, connectors are sometimes described in a similar way, e.g. DB25 subminiature connector could be described as a 25 pole connector.

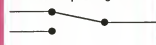
SPST single pole single throw (on/off)



SPDT Single pole double throw



DPST Double pole single throw



DPDT Double pole double throw



Non School/Non Government Accounts

Manufacturers! Open an account with Jaycar! Now large regular clients (not only manufacturers) can buy from Jaycar on account, under certain conditions.

Find out more by calling in to any Jaycar store or call (02) 747 2022

or send us a Fax

(02) 744 0767 - or write!

We will send you an account application form by return.

It's that simple!

Fuses

M205 (5 x 20mm) QUICK BLOW

Cat. SF-2148 100mA
Cat. SF-2150 125mA
Cat. SF-2152 160mA
All above 50¢ ea

10 up 45¢ ea

Cat. SF-2154 250mA
Cat. SF-2155 315mA
Cat. SF-2156 500mA
Cat. SF-2158 1A
Cat. SF-2159 1.25A
Cat. SF-2160 2A
Cat. SF-2162 3A
Cat. SF-2166 5A
Cat. SF-2167 6.5A
Cat. SF-2168 10A
All above 30¢ ea

10 up 25¢ ea

3AG (6.35 x 32mm) QUICK BLOW

Cat. SF-2182 100mA
Cat. SF-2184 150mA
Cat. SF-2186 250mA
Cat. SF-2188 500mA
Cat. SF-2190 1A
Cat. SF-2192 1.5A
Cat. SF-2194 2A
Cat. SF-2196 3A
Cat. SF-2200 5A
Cat. SF-2202 7.5A
Cat. SF-2204 10A
Cat. SF-2206 15A
Cat. SF-2208 20A
Cat. SF-2210 25A
Cat. SF-2212 30A
Cat. SF-2214 35A
Cat. SF-2220 50A
All above 30¢ ea

10 up 25¢ ea

3AG SLOW BLOW

Cat. SF-2224 500mA
Cat. SF-2226 1A
Cat. SF-2228 2A
Cat. SF-2230 3A
Cat. SF-2232 5A
All above \$1.20 ea

10 up \$1.00 ea

5AG 30 amp

Replacement type for inverter kit.

Cat. SF-2235

\$2.25

Fuse Wire

Handy card pack of 8 amp and 15 amp fuse wire. 1 metre length.
Cat. SF-2100

\$1

Fuse Packs

The economical way to buy fuses.

3AG PACK

Consists of:
4 x 500mA, 8 x 1A, 6 x 1.5A, 2 x 2A, 6 x 3A, 4 x 5A, 2 x 7.5A, 4 x 10A

Cat. SF-2240

40 fuses total value \$12.00

ONLY \$8.95

M205 PACK

5 x 500mA, 10 x 1A, 10 x 2A, 5 x 3A 5 x 5A, 10A

Cat. SF-2242

40 fuses \$12.00 value

ONLY \$8.95

Fuseholders IN-LINE

Plastic in-line type. As used on car radios, CB, etc. Takes 3AG fuses.

Cat. SZ-2015

\$1.10 ea

10 or more \$1.00 ea

3AG PANEL MOUNT

Panel mount type. Probably the most common type. Accepts 3AG fuses. Panel hole 15mm

Cat. SZ-2020

\$1.40 ea

10 or more \$1.25 ea

M205 PANEL MOUNT

M205 panel mount type. Takes M205 fuses (20 x 5mm). Panel hole 13mm

Cat. SZ-2030

\$1.10 ea

10 or more \$1.00 ea

PC MOUNT

3AG single.

Cat. SZ-2034

75¢ ea

10 or more 65¢ ea

SAFETY FUSEHOLDER

Fuse retainer is released by simply depressing catch by inserting a screwdriver or any similar tool or object in to the small rectangular hole on top of the fuseholder. Panel hole 15mm.

Cat. SZ-2036

\$1.50 each

10 or more \$1.40 ea



Electricity Authority Approved Fuseholders

3AG 10 amp 240V chassis mount

(32 x 6.35mm)

Cat. SZ-2025

\$3.95 ea

10 or more \$3.50 ea

M205 6.3A 240V chassis mount.

Cat. SZ-2028

\$2.50 ea

10 or more \$2.25 ea



3AG Fuseclips

The easy way to secure fuses on a PCB.

PACKET OF 8

Cat. SZ-2022

\$1.20 pkt

10 or more pkts

\$1.00 each

Pkt of 100

Cat. SZ-2023

\$10.95

Car Blade Fuses

These are used in most new cars. They are easy to replace and are colour coded for easy identification.

Cat. SF-2130

Cat. SF-2132

Cat. SF-2134

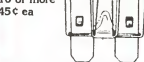
Cat. SF-2136

Cat. SF-2138

50¢ ea

10 or more

45¢ ea



Car Alarm Switch Replacement Globes

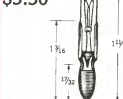
Replacement globes for flashing switches/bezels for car alarms.

1.

Most common. 12V pushin metal flange up 2 sides. Used in Red Light, Yellow Light, Pirahane & Cobra.

Cat. SL-2638

\$5.50

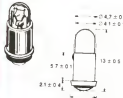


2.

Used in Yellow Light and others.

Cat. SL-2637

\$4.50

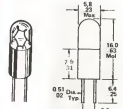


3.

Used in Yellow Light and others.

Cat. SL-2636

\$4.50

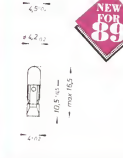
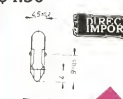


4.

As used in our illuminated pushbutton switches (Cat. SP-0740/2).

Cat. SL-2635

\$4.50



240V Chrome Bezel

Very smart unit. Complete with leads.

Cat. SL-2632 RED
Cat. SL-2633 GREEN

Panel hole 7mm

\$1.80

10+ \$1.70 ea



240V Bezel

Red, sealed, accepts spade lugs or solder. Drill 10mm hole and push in.

Cat. SL-2630

\$1.20

10+ \$1.10 ea



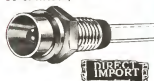
LED Bezel

Chrome housing, 2 volt
Cat. SL-2610 RED
Cat. SL-2612 GREEN

Panel hole 8mm

\$1.75 ea

10+ more \$1.60 ea



Mini Lamps

12 & 6 VOLT MINI LAMPS

Perfect for lighting dials, meters, etc.

12 VOLT with leads

Cat. SL-2639

95¢ ea

10+ more 85¢ ea



6 VOLT with short leads
Cat. SL-2641

40¢ ea

10+ \$2.50

100+ \$15.00



Low Voltage Bezel

Accepts Lilliput globes.
Cat. SL-2620 RED
Cat. SL-2622 GREEN

Panel hole 10mm.

\$1.95

10+ \$1.75 ea



12 Volt Bezel

Red, sealed, 12 volt bezel for any application - small size. Panel hole 7mm.

Cat. SL-2640

\$2.20

10+ \$2.00 ea



12 Volt Bezel

Perfect for car alarms. Orange lens which measures 20 x 20mm. As used in our Claytons burglar alarm kit. Panel hole 15mm.

Cat. SL-2694

\$1.75



12 Volt Illuminated Bezels

Another surplus scoop purchase. These bezels look identical to the expensive rectangular illuminated switches for car alarms, except there is no switch. Quality European brand Arrow Hart.

Normally worth \$15 each.

Complete with globe.

Cat. SL-2670 YELLOW

Cat. SL-2671 ORANGE

\$6.95

10+ \$6.50 ea

Replacement globe Cat. SL-2637



NE2 Neon

90V pigtail neon, as used in strobe kits, etc.

Cat. SL-2690
50¢

10+ 40¢ ea



Xenon Flash Tube

As used in the strobe kit.

Cat. SL-2692

\$5.25



12 Volt Globe Bargain

Another surplus stock purchase. 12V BC car replacement style.

Suits tail lights, blinkers, garden lights, etc.

Usually about \$3 each.

Limited quantities.

Cat. SL-2662

2 FOR \$1



Miniature Edison Screw Globes

Cat. SL-2654 6.3V

Cat. SL-2656 12V

50¢ ea

10+ more 45¢ ea



LILLIPUT GLOBES

Cat. SL-2650 6.3V

Cat. SL-2652 12V

40¢ ea

10+ more 35¢ ea



Globe Holder

Standard MES globe holder

Cat. SL-2658

50¢ ea

10+ more 45¢ ea



Prices

Many catalogues that you get these days do not have prices printed in them. This means that you have to check the price first if you want to order. People who print catalogues without prices have the benefit of being able to change their prices very easily. You wouldn't know! Jaycar's catalogue has a price, including sales tax, ON EVERY ITEM. Once the ink on the page is dry that's the way the printed information stays. We put the price there so that you know immediately what you are up for. You can compare our prices with the competition or make comparative decisions about various models, etc. All of this adds up to convenience of course! That's what we are here for.

When we print the catalogue we basically 'freeze' our prices for as long as possible. On average over 80% of the product prices do not change over the useful life of the catalogue (10 months out of 12). On very many occasions the price goes DOWN not up. Unfortunately, however, you may experience a price rise. This is ALMOST ALWAYS beyond our control. A supplier simply puts his price up! If we cannot find a viable alternative we have no choice. You then have the option whether to buy or not, or seek a refund. The choice is yours. To summarise then: our prices are correct (we triple check) at the time of printing but if in doubt PLEASE check with us first.

OPEN AN ACCOUNT WITH JAYCAR

Jaycar is now accepting account applications from all established companies who can exhibit good trade references.

For application details see our store managers or phone (02) 747 2022

Personal Shoppers

Don't forget to call in early in the month to buy your new copy of Silicon Chip and Electronics Australia. We generally have them available before they arrive in newsagents.



Eveready Red

Cat. SB-2354 AA Pkt of 4	Cat. SB-2362 D Pkt of 2
\$2.65	\$2.40
Cat. SB-2358 C Pkt of 2	Cat. SB-2370 9 volt each
\$1.99	\$2.40

Penlight NiCads

Don't keep wasting money buying throw-away batteries. Step up to NiCad rechargeables.

AA PENLIGHT 500mA/Hr
Cat. SB-2452

\$3.50 ea
4 for \$12.50



Lead Acid Rechargeable

Ideal for alarms or anywhere where constant use depletes batteries quickly. Size: 100(L) x 60(H) inc terminals x 45(W)mm
Discharge current 20 hour rate 60mA
12 VOLT 1.2A/H
Cat. SB-2480

\$22.50

12VOLT 4.5A/H
150(L) x 95(H) inc terminals x 65(W)mm.
Discharge current 20 hour rate 225mA.
Cat. SB-2486

\$43.50



"You can use Jaycar Mail Order Service from just about anywhere!"



ENERGIZER®

Eveready Alkaline

Cat. SB-2380 AAA Pkt of 2	Cat. SB-2395 9 volt each
\$3.95	\$6.75
Cat. SB-2382 AA Pkt of 2	Cat. SB-2396 11 Pkt of 2
\$3.25	\$4.35
Cat. SB-2386 C Pkt of 2	Cat. SB-2397 544 each
\$4.95	\$7.50
Cat. SB-2390 D Pkt of 2	6 volt
\$4.95	

Rechargeable Batteries

"C" SIZE 1.2 A/H capacity Cat. SB-2455	9 VOLT 100mA capacity - priced per each Cat. SB-2458
PACKET OF 2	\$22.50
	\$23.95

"D" SIZE 1.2 A/H capacity Cat. SB-2456	AAA SIZE 180mAh Cat. SB-2454
PACKET OF 2	\$23.95
	\$12.50

12 Volt Battery VR22, EL12

Used in lighters, cameras and more recently car alarm remote switches.

CARBON ZINC
Cat. SB-2420
PACKET OF 2
\$3.75



Watch/Game Batteries

Cat. No	Silver Oxide	Hitachi/ Maxell	Eveready	National	Price (ea)
SB-2512 (G13)	SR44	357		WL-14	\$2.95
SB-2510 (G12)	SR43W	386		WL-11	\$2.50
SB-2508 (G10)	SR1130W	389		WL-10	\$2.50
SB-2506 (G 8)	SR1120W	391		G8	\$2.25
SB-2504 (G 5)	SR48W	393		WL-6	\$2.25
SB-2502 (G 3)	SR41W	392		WL-1	\$1.25
SB-2500 (G 2)	SR726SW	396			\$2.25

ALKALINE

SB-2516	LR-44	A76	LR-44	\$1.50
SB-2514	LR-43	186	LR-43	\$1.50
SB-2518	LR-1130	189	LR-1130	\$1.50



Alligator Clips

HM-3064
Mini red 26mm
SMALL
40¢ 10+ 37¢
HM-3066
Mini black 26mm
40¢ 10+ 37¢
HM-3068
Medium red 32mm
50¢ 10+ 45¢
HM-3070
Medium black 32mm
50¢ 10+ 45¢



Car Battery Type Clips

EXTRA LARGE
These have insulated
colour coded handles and
will clip over a car battery
terminal.
Total length 110mm. Jaw
opening - max 20mm.
Cat. HM-3062
\$2.50 pr
10+ \$2.25



Mini Coil Pack

Pack of 4 standard AM
transistor radio coils (red,
black, yellow and white)
IF, osc, etc.
Cat. LF-1050
PACK 4 \$2.50

F16 Ferrite Slug

Cat. LF-1226
\$1.20

IC Test Clips

SMALL
These have a syringe
action and are ideal for
working with small
components.

RED Cat. HM-3040
BLACK Cat. HM-3041

\$1.20

10 or more
\$1.10 each



MEDIUM
90mm IC clip RED
Cat. HM-3044
90mm IC clip BLACK
Cat. HM-3045

\$1.50

10 or more
\$1.35 each



LARGE
137mm IC clip RED
Cat. HM-3046
137mm IC clip BLACK
Cat. HM-3047

\$2.95

10 or more
\$2.70 each



Porcelain Standoff

Ideal for electric fences. A
round glazed porcelain
insulator measuring 30
dia & 25mm high, with a
19mm hole through the
centre. A roofing screw
would be ideal to fasten
the insulator to a post.
Cat. LF-1090

50¢ ea



Ferrite Beads

Used in many projects for
suppression. Mount
through transistor legs.
Size 4mm O.D. x 2mm
I.D. x 5mm long
Alternating frequency
range 50kHz - 500kHz
Cat. LF-1250

Ferrite Parts

Balun Formers

Ideal for RF matching
transformers and
balanced mixers.
Also used to match 300
to 75 ohm TV antennas.
LARGE: Type 1050/1/
F14 40MHz to 200MHz
Cat. LF-1220

\$1.25 each

10+ \$1.10



SMALL:
Old No.: Type 1050/2/
F14
New No.: Type 42-002-31
10MHz to 250MHz
Cat. LF-1222

95¢ each 10+ 85¢

NEOSID
FORMER
No: 52-001.60
Cat. LF-1224 **\$1.20**

Toroidal Ring Cores

Suitable for interference
suppression filters, pulse
transformers and
broadband transformers.
They have no air gaps
and are the powdered iron
type.

LARGE:
(Old No.: Type 17-146-
10; New No.: Type 17-
745-2)
Size 44 O.D. x 24 I.D. x
16.5mm(H)
Cat. LF-1242

\$11.95

SMALL:
(Old No.: Type 17-132-
10; New No.: Type 17-
732-22)
Size 15 O.D. x 7.5 I.D. x
6mm(H)
Cat. LF-1240

\$3.95



Tube Cores

Ideal for making small
inductors for RF
suppression/bypass.
Simply loop a short
length of enamelled
copper wire back through.
Low cost RF/spike
suppression!
Siemens B62110-A6021
Type
Dimensions: 18mm long,
6mm dia., 3mm dia. hole
PACK 10 Cat. LF-1210
\$1.00



Pot Cores

Cat. LF-1265
FX2242 Cores (pr)
\$15.95

Cat. LF-1266
FX2242 Bobbin
\$.90

Cat. LF-1260
FX2243 Cores (pr)
\$17.95

Cat. LF-1261
FX2243 Bobbin
\$ 1.25



Ferrite Rod

TYPE 1
Length 200mm x 9mm
diameter - round
Cat. LF-1010

\$1.50 ea

10+ \$1.20 ea

TYPE 2
Length 120mm x 9mm
diameter - round
Cat. LF-1015

75¢ ea

10+ 50¢ ea

TYPE 3
Length 79mm x 13mm -
flat
Cat. LF-1018

75¢ ea



Quality Video/ Audio RF Modulator

Our best ever unit. This
modulator has been
specially built to our
stringent specifications. It
is a VHF unit switchable
to Aust. Ch 3 or 4. The
audio is placed at the
correct subcarrier
frequency and output
frequency is stable with
good strong signal. Full
specs (we mean FULL)
are supplied with each
unit.
Cat. LM-3848

\$19.95



Video Modulator

Another Jaycar surplus
stock purchase.
UM1082 video modulator.
Operates on 12 volts.
RCA jack output. Size 42
x 27 x 16mm
Cat. LM-3846

\$3.95

10 up \$3.50 ea



TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your
surplus stocks of
components and
equipment. We are
continually on the lookout
for sources of prime
quality merchandise.

CALL GARY
JOHNSTON OR
BRUCE ROUTLEY
NOW ON
(02) 747 2022

20¢ ea 10 up 16¢ each

Jaycar Introduces the Easy Way to Buy 1/4 watt Resistors

Don't ever be short of that resistor again. Jaycar now has available 7 different packs of 1/4W 5% resistors available.

SAVE \$22.55 OVER BUYING INDIVIDUAL PARTS!

Each pack contains 10 of each value, and packs cover the complete range from 1 ohm to 10M ohms.

Values (10 of each) 1, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2 ohms
 Values (10 of each) 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82 ohms
 Values (10 of each) 100, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 820 ohms
 Values (10 of each) 1k, 1.2k, 1.5k, 1.8k, 2.2k, 2.7k, 3.3k, 3.9k, 4.7k, 5.6k, 6.8k, 8.2k
 Values (10 of each) 10k, 12k, 15k, 18k, 22k, 27k, 33k, 39k, 47k, 56k, 68k, 82k
 Values (10 of each) 100k, 120k, 150k, 180k, 220k, 270k, 330k, 390k, 470k, 560k, 680k, 820k
 Values (10 of each) 1M, 1.2M, 1.5M, 1.8M, 2.2M, 2.7M, 3.3M, 3.9M, 4.7M, 5.6M, 6.8M, 8.2M, 10M
 1 pack of each of the above. 7 packs in all giving a total of 850 resistors 10 of each value

Total 120 Cat. RR-1690 \$3.95
 Total 120 Cat. RR-1691 \$3.95
 Total 120 Cat. RR-1692 \$3.95
 Total 120 Cat. RR-1693 \$3.95
 Total 120 Cat. RR-1694 \$3.95
 Total 120 Cat. RR-1695 \$3.95
 Total 130 Cat. RR-1696 \$3.95
 Cat. RR-1697 VALUE AT \$19.95 SAVE \$7.70

A GREAT WAY TO NEVER BE OUT OF THAT ODD RESISTOR AND SAVE A PACKET AT THE SAME TIME!!

	A	B	C	D	E		A	B	C	D	E
OR1					RR-3206	1K6	RR-0577				
OR22					RR-3208	1K8	RR-0578	RR-1582	RR-2280	RR-2780	RR-3304
OR47				RR-2500	RR-3214	2K0	RR-0579				
OR75				RR-3218	RR-3219	2K2	RR-0580	RR-1584	RR-2282	RR-2782	RR-3306
OR82					RR-3320	2K4	RR-0581				
1R0	RR-1502	RR-2002	RR-2502		RR-3340	2K7	RR-0582	RR-1586	RR-2284	RR-2784	RR-3308
1R1						3K0	RR-0583				
1R2	RR-1504	RR-2004	RR-2504		RR-3341	3K3	RR-0584	RR-1588	RR-2286	RR-2786	RR-3310
1R3						3K6	RR-0585				
1R5	RR-1506	RR-2006	RR-2506		RR-3342	3K9	RR-0586	RR-1590	RR-2288	RR-2788	
1R6						4K3	RR-0587				
1R8	RR-1508	RR-2008	RR-2508		RR-3343	4K7	RR-0588	RR-1592	RR-2290	RR-2790	RR-3312
2R0						5K1	RR-0589				
2R2	RR-1510	RR-2010	RR-2510		RR-3344	5K6	RR-0590	RR-1594	RR-2292	RR-2792	
2R4						6K2	RR-0591				
2R7	RR-1512	RR-2012	RR-2512		RR-3345	6K8	RR-0592	RR-1596	RR-2294	RR-2794	
3R0						7K3	RR-0593				
3R3	RR-1514	RR-2014	RR-2514		RR-3346	8K2	RR-0594	RR-1598	RR-2296	RR-2796	
3R6						9K1	RR-0595				
3R9	RR-1516	RR-2016	RR-2516		RR-3347	10K	RR-0596	RR-1600	RR-2298	RR-2798	
4R3						11K	RR-0597				
4R7	RR-1518	RR-2018	RR-2518		RR-3348	12K	RR-0598	RR-1602	RR-2300	RR-2800	
5R1						13K	RR-0599				
5R6	RR-1520	RR-2020	RR-2520		RR-3349	15K	RR-0600	RR-1604	RR-2302	RR-2802	
6R2						16K	RR-0601				
6R8	RR-1522	RR-2022	RR-2522		RR-3350	18K	RR-0602	RR-1606	RR-2304	RR-2804	
7R5						20K	RR-0603				
8R2	RR-1524	RR-2024	RR-2524		RR-3351	22K	RR-0604	RR-1608	RR-2306	RR-2806	
9R1						24K	RR-0605				
10R	RR-0524	RR-1526	RR-2026		RR-3352	27K	RR-0606	RR-1610	RR-2308	RR-2808	
11R	RR-0525					30K	RR-0607				
12R	RR-0526	RR-1528	RR-2028		RR-3353	33K	RR-0608	RR-1612	RR-2310	RR-2810	
13R	RR-0527					36K	RR-0609				
15R	RR-0528	RR-1530	RR-2030		RR-3354	39K	RR-0610	RR-1614	RR-2312	RR-2812	
16R	RR-0529					43K	RR-0611				
18R	RR-0530	RR-1532	RR-2032		RR-3355	47K	RR-0612	RR-1616	RR-2314	RR-2814	
20R	RR-0531					51K	RR-0613				
22R	RR-0532	RR-1534	RR-2034		RR-3356	56K	RR-0614	RR-1618	RR-2316	RR-2816	
24R	RR-0533					62K	RR-0615				
27R	RR-0534	RR-1536	RR-2036		RR-3357	68K	RR-0616	RR-1620	RR-2318	RR-2818	
30R	RR-0535					75K	RR-0617				
33R	RR-0536	RR-1538	RR-2038		RR-3358	82K	RR-0618	RR-1622	RR-2320	RR-2820	
36R	RR-0537					91K	RR-0619				
39R	RR-0538	RR-1540	RR-2040		RR-3359	100K	RR-0620	RR-1624	RR-2322	RR-2822	
43R	RR-0539					110K	RR-0621				
47R	RR-0540	RR-1542	RR-2042		RR-3360	120K	RR-0622	RR-1626	RR-2324	RR-2824	
51R	RR-0541					130K	RR-0623				
56R	RR-0542	RR-1544	RR-2044		RR-3361	150K	RR-0624	RR-1628	RR-2326	RR-2826	
62R	RR-0543					160K	RR-0625				
68R	RR-0544	RR-1546	RR-2046		RR-3362	180K	RR-0626	RR-1630	RR-2328	RR-2828	
75R	RR-0545					200K	RR-0627				
82R	RR-0546	RR-1548	RR-2048		RR-3363	220K	RR-0628	RR-1632	RR-2330	RR-2830	
91R	RR-0547					240K	RR-0629				
100R	RR-0548	RR-1550	RR-2050		RR-3364	270K	RR-0630	RR-1634	RR-2332	RR-2832	
110R	RR-0549					300K	RR-0631				
120R	RR-0550	RR-1552	RR-2052		RR-3365	330K	RR-0632	RR-1636	RR-2334	RR-2834	
130R	RR-0551					360K	RR-0633				
150R	RR-0552	RR-1554	RR-2054		RR-3366	390K	RR-0634	RR-1638	RR-2336	RR-2836	
160R	RR-0553					430K	RR-0635				
180R	RR-0554	RR-1556	RR-2056		RR-3367	470K	RR-0636	RR-1640	RR-2338	RR-2838	
200R	RR-0555					510K	RR-0637				
220R	RR-0556	RR-1558	RR-2058		RR-3368	560K	RR-0638	RR-1642	RR-2340	RR-2840	
240R	RR-0557					620K	RR-0639				
270R	RR-0558	RR-1560	RR-2060		RR-3369	680K	RR-0640	RR-1644	RR-2342	RR-2842	
300R	RR-0559					750K	RR-0641				
330R	RR-0560	RR-1562	RR-2062		RR-3370	820K	RR-0642	RR-1646	RR-2344	RR-2844	
360R	RR-0561					910K	RR-0643				
390R	RR-0562	RR-1564	RR-2064		RR-3371	1M	RR-0644	RR-1648	RR-2346	RR-2846	
430R	RR-0563					1M2		RR-1650	RR-2348	RR-2848	
470R	RR-0564	RR-1568	RR-2068		RR-3372	1M5		RR-1652	RR-2350	RR-2850	
510R	RR-0565					1M8		RR-1654	RR-2352	RR-2852	
560R	RR-0566	RR-1570	RR-2068		RR-3373	2M2		RR-1656	RR-2354	RR-2854	
620R	RR-0567					2M7		RR-1658	RR-2356	RR-2856	
680R	RR-0568	RR-1572	RR-2070		RR-3374	3M3		RR-1660	RR-2358	RR-2858	
750R	RR-0569					3M9		RR-1662	RR-2360	RR-2860	
820R	RR-0570	RR-1574	RR-2072		RR-3375	4M7		RR-1664	RR-2362	RR-2862	
910R	RR-0571					5M6		RR-1666	RR-2364	RR-2864	
1K0	RR-0572	RR-1576	RR-2074		RR-3376	6M8		RR-1668	RR-2366	RR-2866	
1K1	RR-0573					8M2		RR-1670	RR-2368	RR-2868	
1K2	RR-0574	RR-1578	RR-2076		RR-3300	10M	RR-0660	RR-1672	RR-2370	RR-2870	
1K3	RR-0575										
1K5	RR-0576	RR-1580	RR-2078		RR-3302						

A. 1/4W Metal Film
 1% 50ppm 9¢ each -
 100 up 7¢ each

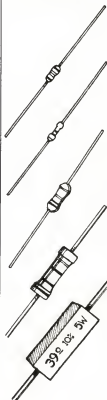
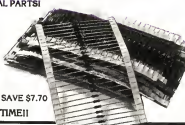
B. 1/4W Carbon Film
 5% 5¢ each -
 100 up 4¢ each

C. 1/2W Carbon Film
 5% 7¢ each -
 100 up 6¢ each

D. 1W Wirewound
 (RR-2500)
 400¢ each
 100 up 35¢ each
 1W Carbon Film
 5% (RR-2502/2524)
 20¢ each -
 100 up 17¢ each
 1W Carbon Film 5%
 (RR-2526/2778)
 16¢ each -
 100 up 14¢ each

E. 5W Wirewound
 65¢ each -
 10 up 60¢ each

F. 10W wirewound
 \$1.30 each -
 10 up \$1.20 each



Direct Import PCB Mounting Potentiometers with Imperial Standard Shaft & Bushings

After suffering enormous supply frustration in recent years we have decided to direct import quality potentiometers to our rigid engineering specifications. The potentiometers are full size - 24mm diameter types - not the dinky 10mm ones that you sometimes see these days. They also have genuine 6.35mm (1/4") shafts with a flat machined 25% of the diameter for grub screws or interference fit knob mounting. The shaft is a generous 38mm long. The bush is a 3/8" 32 T.H.D. type which we believe is necessary for good fixing to a panel. Many pots these days have 7mm - and less - bushes.

Another important feature of the pots is their PCB mount capability. The pins are rigidly mounted on phenolic with the centre pin offset from the two outer terminals. When soldered into a PCB, the pot is quite rigidly held on its own. Dual gang pots are held in 6 places and require no extra mechanical mounting assistance. The pins are large enough to terminate screened cable, etc., if the job requires hard wiring. An engineering drawing appears below. You may safely use it to design PCB artwork etc., as we have standardised on this design.

CUSTOMERS PLEASE NOTE:

While we are introducing stock of our new pots there will naturally be a transition period where old stock will remain. This may not be a cause for concern but if it is, please ASK for the new product. (The cat numbers will be the same.)

Log Single Gang

RP-3604 1k	
RP-3608 5k	
RP-3610 10k	
RP-3614 25k	
RP-3616 50k	\$1.65 ea
RP-3618 100k	10 or more
RP-3620 250k	\$1.40 each
RP-3622 500k	
RP-3624 1M	
RP-3626 2M	

Linear Single Gang

Cat. No	Type	
RP-3502	500R	
RP-3504	1k	
RP-3508	5k	
RP-3510	10k	
RP-3514	25k	
RP-3516	50k	
RP-3518	100k	\$1.65 ea
RP-3520	250k	10 or more
RP-3522	500k	\$1.40 each
RP-3524	1M	
RP-3526	2M	

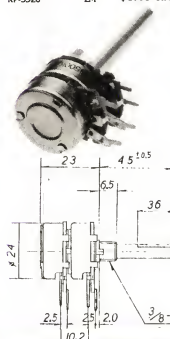
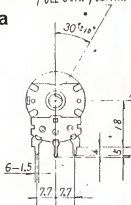
Linear Double Gang

Cat. No	Type	
RP-3706 10k		\$3.25 ea
RP-3708 25k		10 or more
RP-3710 50k		\$3.00 each
RP-3712 100k		
RP-3716 500k		
RP-3718 1M		

Log Double Gang

Cat. No	Type	
RP-3756 10k		\$3.25 ea
RP-3758 25k		10 or more
RP-3760 50k		\$3.00 each
RP-3762 100k		
RP-3766 500k		
RP-3768 1M		
RP-3785 250k		

FULL C.C.W POSITION



Wire Wound

3 WATT - WITH SOLDER LUG

Cat. RP-3954	25 ohm
Cat. RP-3956	50 ohm
Cat. RP-3958	100 ohm

\$7.50 ea
10 or more \$7.20 ea

Vertical Miniature Trimpots 10mm

OPEN CARBON TYPE **50¢ ea**
10 or more **45¢ ea**

Cat. No	Type
RT-4002	100 ohm
RT-4031	200 ohm
RT-4033	500 ohm
RT-4034	1k
RT-4035	2k
RT-4037	5k
RT-4039	10k
RT-4040	20k
RT-4042	50k
RT-4043	100k
RT-4044	200k
RT-4046	500k
RT-4047	1M
RT-4048	2M



Vertical Miniature Trimpots 5mm

OPEN CARBON TYPE **50¢ ea**
10 or more **45¢ ea**

Cat. No	Type
RT-4004	100 ohm
RT-4006	250 ohm
RT-4008	500 ohm
RT-4010	1k
RT-4012	2k
RT-4014	5k
RT-4016	10k
RT-4018	20k
RT-4020	50k
RT-4022	100k
RT-4024	250k
RT-4026	500k
RT-4028	1M
RT-4029	2.2M



Horizontal Mini Trimpot

Cat. No	Type	
RT-4302	100 ohm	50¢ ea
RT-4304	500 ohm	10 or more
RT-4306	1k	45¢ each
RT-4308	2k	
RT-4310	5k	
RT-4312	10k	
RT-4314	20k	
RT-4316	50k	
RT-4318	100k	
RT-4320	200k	
RT-4324	500k	
RT-4328	1M	
RT-4330	2M	



Trimpot Specifications

Resistance Tolerance	±20%
Total Rotation Angle	≥260°
Start Torque	3 to 30mN·m
Max Operating Voltage	100V
Power Rating	0.2W at 55° 0W at 85° -25°C to +85°C
Temp. Range	±1000 PPM/°C
Temp. Coefficient	max. change after 100 cycles ±15%
Rotational Life	max. change after 1,000 hours ±15%
Humidity Load Life	max. change after 1,000 hours ±15%
Load Life	max. change after 1,000 hours ±15%
Contact Resistance Variation	5% max change at mid-range
Mechanical Resistance	Vibration ±2% max change Shock ±5% max change

Slider Pots - 45mm TYPE

Cat. No	Type	
RP-3904	2k linear	
RP-3912	50k linear	
RP-3910	50k log	\$3.95 ea
RP-3914	50k 45M curve	10 or more \$3.50
RP-3925	500k linear	

60mm TYPE
RP-3932 250k dual curve 5B
RP-3938 10K LOG single

\$5.50 ea
10 or more \$5.00 ea



Log Switch Pots

Rotary log switch pots with DPST switch and 6.35mm (1/4") shaft with solder terminals

RP-3812 25k	
RP-3818 100k	\$2.95 ea
RP-3822 500k	10 or more \$2.70 ea



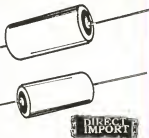
Multiturn Cermet

Cat. No	Type	
RT-4602	100 ohm	
RT-4604	500 ohm	
RT-4608	1k	
RT-4610	2k	
RT-4612	5k	
RT-4614	10k	\$1.95 ea
RT-4616	20k	10 or more \$1.80 ea
RT-4618	50k	
RT-4620	100k	
RT-4622	1M	



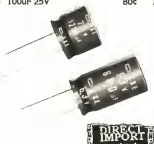
Electrolytic. Axial (RT)

Cat. No.	Type	1-9	10+
Cat. RE-5801	0.47uF 63V	35c	32c
Cat. RE-5802	1uF 63V	35c	32c
Cat. RE-5804	2.2uF 63V	35c	32c
Cat. RE-5810	3.3uF 25V	40c	36c
Cat. RE-5815	4.7uF 25V	40c	36c
Cat. RE-5820	4.7uF 63V	40c	36c
Cat. RE-5832	10uF 25V	35c	32c
Cat. RE-5840	10uF 63V	45c	43c
Cat. RE-5855	25uF 35V	35c	32c
Cat. RE-5860	25uF 63V	35c	32c
Cat. RE-5864	47uF 16V	35c	32c
Cat. RE-5865	47uF 25V	35c	32c
Cat. RE-5875	47uF 63V	45c	42c
Cat. RE-5880	100uF 25V	55c	50c
Cat. RE-5885	100uF 63V	\$1.00	90c
Cat. RE-5888	100uF 250V	\$1.00	80c
Cat. RE-5892	220uF 16V	50c	45c
Cat. RE-5895	220uF 25V	60c	55c
Cat. RE-5897	220uF 63V	\$1.00	90c
Cat. RE-5901	470uF 16V	80c	75c
Cat. RE-5903	470uF 25V	\$1.30	\$1.20
Cat. RE-5905	470uF 50V	\$1.90	\$1.80
Cat. RE-5908	680uF 40V	\$1.20	\$1.00
Cat. RE-5909	680uF 63V	\$1.50	\$1.30
Cat. RE-5912	1000uF 12V	\$1.00	90c
Cat. RE-5915	1000uF 25V	\$1.40	\$1.30
Cat. RE-5918	1000uF 33V	\$1.80	\$1.70
Cat. RE-5920	1000uF 63V	\$2.85	\$2.65
Cat. RE-5930	2500uF 16V	\$1.85	\$1.75
Cat. RE-5935	2500uF 25V	\$2.95	\$2.75
Cat. RE-5940	2200/2500uF 35V	\$3.25	\$3.00
Cat. RE-5945	2500uF 60V	\$3.50	\$3.25
Cat. RE-5970	4700uF 16V	\$2.50	\$2.00
Cat. RE-5975	4700uF 35V	\$3.25	\$3.00



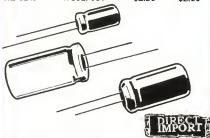
RBLL Low Leakage Electrolytics

Cat. No.	Type	1-9	10+
RL-6402	0.1uF 50V	32c	30c
RL-6404	0.15uF 50V	32c	30c
RL-6406	0.22uF 50V	32c	30c
RL-6408	0.33uF 50V	32c	30c
RL-6410	0.47uF 50V	32c	30c
RL-6412	0.68uF 50V	32c	30c
RL-6414	1.0uF 50V	32c	30c
RL-6418	1.5uF 50V	35c	32c
RL-6420	2.2uF 50V	35c	32c
RL-6422	3.3uF 50V	35c	32c
RL-6424	4.7uF 50V	38c	35c
RL-6426	6.8uF 50V	40c	36c
RL-6428	10uF 50V	45c	42c
RL-6430	22uF 50V	45c	42c
RL-6432	33uF 50V	45c	42c
RL-6434	47uF 50V	65c	60c
RL-6436	100uF 25V	80c	72c



Electrolytic RB (PC Mount)

Cat. No.	Type	1-9	10+
RE-6020	0.47 63V	30c	28c
RE-6030	1.0UF 50V	28c	26c
RE-6032	1.0 63V	32c	30c
RE-6036	2.2uF 25V	28c	26c
RE-6042	2.02 63V	30c	28c
RE-6045	3.3uF 16V	28c	26c
RE-6050	4.07 25V	28c	26c
RE-6050	4.07 50V	36c	34c
RE-6066	10uF 16V	28c	26c
RE-6070	10uF 25V	30c	28c
RE-6075	10uF 63V	35c	33c
RE-6080	22uF 50V	36c	34c
RE-6090	25uF 25V	30c	28c
RE-6095	33uF 25V	35c	33c
RE-6100	47uF 16V	32c	30c
RE-6110	47uF 25V	35c	33c
RE-6122	47uF 63V	36c	34c
RE-6130	100uF 16V	35c	33c
RE-6140	100uF 25V	38c	36c
RE-6150	100uF 63V	75c	65c
RE-6158	220uF 16V	45c	40c
RE-6160	220uF 25V	55c	50c
RE-6180	330uF 50V	85c	80c
RE-6188	330uF 16V	65c	55c
RE-6200	330uF 25V	78c	72c
RE-6192	330uF 63V	\$1.20	\$1.10
RE-6194	470uF 16V	60c	55c
RE-6195	470uF 25V	78c	72c
RE-6210	470uF 63V	\$1.50	\$1.40
RE-6220	1000uF 16V	\$1.00	90c
RE-6230	1000uF 25V	\$1.25	\$1.15
RE-6236	1000uF 63V	\$1.95	\$1.85
RE-6240	2500uF 25V	\$1.85	\$1.75
RE-6242	3300uF 25V	\$3.00	\$2.50
RE-6243	4700uF 16V	\$2.50	\$2.00

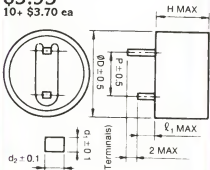


Super Capacitor

Super capacitor is a new standby power source capable of providing up to 30 days back-up voltage and current to CMOS RAMS during power failures.

- Never needs replacing or maintenance
- Non polarised
- Can be soldered onto PCB's
- Can be charged at high and low current rates i.e. microamps to amps
- Completely safe
- Extremely small

Capacitance 0.047 Farad Volts 15
Cat. RV-6700
\$3.95
10+ \$3.70 ea



Dimensions	Weight
Unit D H max P d1 d2 l1 g (oz.)	
mm 14.5 15 5.1 0.4 1.2 4.2 3.5	

Electrolytic Pack

55 quality mostly RB type electrolytics supplied.
Values range from 1uF to 470uF. Voltages from 16 to 63.
Cat. RE-6250
PACK OF 55 10+ \$5.85

\$6.50

RG Chassis Mount

Cat. No.	Type	1-9	10+
RU-6708	4000uF 75V	\$1.50	\$12.50
RU-6710	8000uF 75V	\$17.75	\$17.25

Size RU-6708 47 x 34mm
Size RU-6710 58 x 39mm
Supplied with mounting bracket



RP Electrolytics

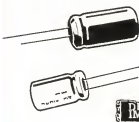
Cat. No.	Type	1-9	10+
RU-6706	2500uF 80V	\$ 8.50	\$ 8.10
RU-6709	5600uF 40V	\$ 9.50	\$ 8.75
RU-6720	10000uF 35V	\$11.50	\$11.00

PC board mount with orientation/support pin
Size RU-6706 35 x 30mm
Size RU6709 42 x 26mm
Size RU-6720 43 x 30mm



Bi-Polar RB Electrolytic

Cat. No.	Type	1-9	10+
RY-6802	1.0uF 50V	70c	65c
RY-6804	2.2uF 50V	70c	65c
RY-6805	3.3uF 50V	70c	65c
RY-6806	4.7uF 50V	70c	65c
RY-6808	6.8uF 50V	90c	80c
RY-6810	10uF 50V	90c	80c
RY-6816	22uF 50V	\$1.20	\$1.10
RY-6818	33uF 50V	\$1.50	\$1.35
RY-6820	47uF 50V	\$1.75	\$1.60



**TURN YOUR
SURPLUS STOCK
INTO CASH!!**

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY JOHNSTON
OR BRUCE ROUTLEY**

**NOW
ON (02) 747 2022**

100 Volt Greencaps

Metallised Polyester

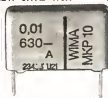
Cat. RG-5010	0.001uF 1Nf	1-9	10+	25¢	22¢
Cat. RG-5012	0.002uF 1Nf	25¢	22¢	25¢	22¢
Cat. RG-5015	0.0015uF 1Nf	25¢	22¢	25¢	22¢
Cat. RG-5018	0.0018uF 1Nf	25¢	22¢	25¢	22¢
Cat. RG-5022	0.0022uF 2Nf	25¢	22¢	25¢	22¢
Cat. RG-5027	0.0027uF 2Nf	25¢	22¢	25¢	22¢
Cat. RG-5033	0.0033uF 3Nf	25¢	22¢	25¢	22¢
Cat. RG-5039	0.0039uF 3Nf	25¢	22¢	25¢	22¢
Cat. RG-5047	0.0047uF 4Nf	25¢	22¢	25¢	22¢
Cat. RG-5050	0.0050uF 5Nf	25¢	22¢	25¢	22¢
Cat. RG-5055	0.0055uF 5Nf	25¢	22¢	25¢	22¢
Cat. RG-5060	0.0060uF 6Nf	25¢	22¢	25¢	22¢
Cat. RG-5065	0.0065uF 6Nf	25¢	22¢	25¢	22¢
Cat. RG-5070	0.0070uF 7Nf	25¢	22¢	25¢	22¢
Cat. RG-5075	0.0075uF 7Nf	25¢	22¢	25¢	22¢
Cat. RG-5080	0.0080uF 8Nf	25¢	22¢	25¢	22¢
Cat. RG-5085	0.0085uF 8Nf	25¢	22¢	25¢	22¢
Cat. RG-5090	0.0090uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5095	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5100	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5105	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5110	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5115	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5120	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5125	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5130	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5135	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5140	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5145	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5150	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5155	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5159	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5165	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5168	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5170	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5175	0.0095uF 9Nf	25¢	22¢	25¢	22¢
Cat. RG-5180	0.0095uF 9Nf	25¢	22¢	25¢	22¢



630 Volt Greencap

Metallised Polyester

Cat. RG-5201	0.01uF 10N	1-9	10+	70¢	65¢
Cat. RG-5202	0.022uF 22N	70¢	65¢	70¢	65¢
Cat. RG-5203	0.033uF 33N	95¢	90¢	95¢	90¢
Cat. RG-5205	0.047uF 47N	95¢	90¢	95¢	90¢
Cat. RG-5210	0.1uF 100N	\$1.40	\$1.30	\$1.40	\$1.30
Cat. RG-5222	0.22uF 220N	\$1.60	\$1.50	\$1.60	\$1.50
Cat. RG-5233	0.33uF 330N	\$2.00	\$1.80	\$2.00	\$1.80
Cat. RG-5247	0.47uF 470N	\$2.00	\$1.80	\$2.00	\$1.80

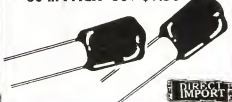


Greencap Pack

60 top quality prime spec greencaps supplied.
From 0.001uF to 0.22uF, all 100V
Cat. RG-5199

\$7.95

60 in PACK 10+ \$7.50



Mixed Capacitor Pack

Don't miss this bargain! This pack contains approximately 150 assorted capacitors. Not junk values, most are normal stock lines. Here's what you get*

RT Electro	1uF, 4.7uF, 25uF, 100uF, 220uF, 470uF most 63V, 10,000uF 16V
RB Electro	1uF, 2.2uF, 25uF, 47uF, 100V 0.0022uF, 0.01uF
Greenap Ceramic	0.22uF, 1uF, 630V 0.022uF, 0.1uF, 4.7pF, 47pF, 220pF, 470pF, 0.022uF
Polystyrene 1kV Ceramic	220pF, 820pF, 2200pF 330pF, 470pF, 680pF - PLUS LOTS MORE

150 PRIME SPEC CAPACITORS FOR \$10.00

That's only 6.6 cents each!!
SAVE 84%

Cat. RE-6260
At our current prices these caps are worth \$61.00
*We reserve the right to make changes to this pack if stock shortages occur.



Mixed Electrolytic Capacitor Pack

Another absolute bargain. This pack contains approximately 80 assorted RB/RT style electrolytics. Most are standard stock lines. Here is what a typical pack contains.

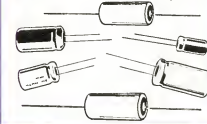
uF VALUES	1, 2.2, 10, 22, 25, 47, 100, 150, 220, 470, 680, 4700, 10,000
VOLTAGES	6.3, 10, 16, 25, 35, 40, 50, 63, 250

A great asset for your parts bin

OVER 80 CAPACITORS FOR \$10

That's only 12.5¢ each. Our cheapest stock electro costs 28¢, and some supplied in this pack cost as much as \$3 each
We reserve the right to make changes to this pack if stock shortages occur.
Cat. RE-6280

\$10



Jaycar Introduces the Easy Way to Buy Greencaps

Don't ever run short of that greencap again. 5 easy to buy, low cost packs which represents a considerable saving over individual prices. Each pack contains 10 of each value and packs cover the complete range from 0.001uF to 0.1uF.

PACK 1. 10 OF EACH VALUE (TOTAL 50)
0.001, 0.0012, 0.0015, 0.0018, 0.0022
Cat. RG-5000 \$6.95

PACK 2. 10 OF EACH VALUE (TOTAL 50)
0.0027, 0.0033, 0.0039, 0.0047, 0.0056
Cat. RG-5001 \$6.95

PACK 3. 10 OF EACH VALUE (TOTAL 50)
0.0068, 0.0082, 0.01, 0.012, 0.015
Cat. RG-5002 \$6.95

PACK 4. 10 OF EACH VALUE (TOTAL 50)
0.018, 0.022, 0.027, 0.033, 0.039
Cat. RG-5003 \$6.95

PACK 5. 10 OF EACH VALUE (TOTAL 50)
0.047, 0.056, 0.068, 0.082, 0.1
Cat. RG-5004 \$6.95

A great way to never be out of that odd greencap and save a packet at the same time.



Bargain RF Choke Pack

Over 50 pieces supplied!
A pack of 30 brand new RF chokes with at least 14 different values! Popular values include: 1.5, 4.7, 12, 15, 18, 22, 68, 100 & 1000uH. Each choke is resin dipped and colour coded (they look like bead tantalums). A colour coding chart is supplied so that you can decipher the value.

BONUS: Not only do you get 30 useful chokes we will give you up to an extra charge at least another 30 more RF chokes. These are genuine chokes but are commonly called 'peaking coils'. They look like a 1/2 watt resistor. (Read the choke value in uH as you would a resistor value.)

We reserve the right to make changes if stock shortages occur.

Cat. RG-5600

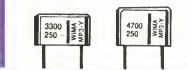
\$5

Less than 5¢ a part



Mains 250V AC Capacitors

Cat. No	Type	1-9	10+
RG-5250	0.01uF	90¢	85¢
RG-5251	0.022uF	90¢	85¢
RG-5252	0.033uF	\$1.00	90¢
RG-5253	0.047uF	\$1.35	\$1.15
RG-5254	0.1uF	\$1.75	\$1.55
RG-5255	0.22uF	\$1.75	\$2.00
RG-5257	0.47uF	\$2.75	\$2.50



50 Volt Ceramic

Cat. No	Type	Cat. No	Type
RC-5300	1pF	RC-5324	100pF
RC-5301	1.2pF	RC-5325	120pF
RC-5302	1.5pF	RC-5326	150pF
RC-5303	1.8pF	RC-5327	180pF
RC-5304	2.2pF	RC-5328	220pF
RC-5305	2.7pF	RC-5329	270pF
RC-5306	3.3pF	RC-5330	330pF
RC-5307	3.9pF	RC-5331	390pF
RC-5308	4.7pF	RC-5332	470pF
RC-5309	5.6pF	RC-5333	560pF
RC-5310	6.8pF	RC-5334	680pF
RC-5311	8.2pF	RC-5335	820pF
RC-5312	10pF	RC-5336	1000pF
RC-5313	12pF	RC-5340	2200pF
RC-5314	15pF	RC-5342	3300pF
RC-5315	18pF	RC-5344	4700pF
RC-5316	22pF	RC-5345	5600pF
RC-5317	27pF	RC-5346	6800pF
RC-5318	33pF	RC-5347	8200pF
RC-5319	39pF	RC-5348	0.01uF
RC-5320	47pF	RC-5352	0.022uF
RC-5321	56pF	RC-5354	0.033uF
RC-5322	68pF	RC-5356	0.047uF
RC-5323	82pF		



ALL 18¢ ea 10 or more 15¢ ea

50 Volt Ceramic 10%

Cat. No	Type	1-9	10+
RC-5360	0.1uF 100N	25¢	21¢
RC-5364	0.22uF 220N	35¢	32¢
RC-5367	0.39uF 390N	40¢	35¢
RC-5368	0.47uF 470N	40¢	35¢



Ceramic Capacitor Packs

Jaycar has already introduced you to the easy and economical way to buy resistors and greenpacks. Now you can purchase ceramics in packs, so you'll never run out of one again. Eight, easy to buy, low cost packs which represent a considerable saving over buying individual parts. At 18¢ each ceramic, you figure out the savings.

Each pack contains 10 of each value and packs cover the complete range from 1pF to 0.1uF.

PACK 1 - 10 OF EACH VALUE (TOTAL 60)

1pF, 1.2, 1.5, 1.8, 2.2, 2.7

Cat. RC-5390 \$6.95

PACK 2 - 10 OF EACH VALUE (TOTAL 60)

3.3pF, 3.9, 4.7, 5.6, 6.8, 8.2

Cat. RC-5391 \$6.95

PACK 3 - 10 OF EACH VALUE (TOTAL 60)

10pF, 12, 15, 18, 22, 27

Cat. RC-5392 \$6.95

PACK 4 - 10 OF EACH VALUE (TOTAL 60)

33pF, 39, 47, 56, 68, 82

Cat. RC-5393 \$6.95

PACK 5 - 10 OF EACH VALUE (TOTAL 60)

100pF, 120, 150, 180, 220, 270

Cat. RC-5394 \$6.95

PACK 6 - 10 OF EACH VALUE (TOTAL 60)

330pF, 390, 470, 560, 680, 820

Cat. RC-5395 \$6.95

PACK 7 - 10 OF EACH VALUE (TOTAL 60)

0.01uF, .0022, .0033, .0047, .0056, .0068

Cat. RC-5396 \$6.95

PACK 8 - 10 OF EACH VALUE (TOTAL 60)

.0082uF, .01, .022, .033, .047, .1

Cat. RC-5397 \$7.50

High Voltage Ceramics

3kV

Cat. No Type 1-9 10+

RC-5380 0.01uF \$1.95 \$1.80

2kV

RC-5378 0.001uF SPECIAL \$2.50 pkt of 5

Polystyrene

Also known as 'Styroseals'

Cat. No	Type	1-9	10+
RS-5520	33pF	90¢	80¢
RS-5522	39pF	90¢	80¢
RS-5524	47pF	90¢	80¢
RS-5526	56pF	90¢	80¢
RS-5528	68pF	90¢	80¢
RS-5530	82pF	90¢	80¢
RS-5532	100pF	90¢	80¢
RS-5534	120pF	90¢	80¢
RS-5536	150pF	90¢	80¢
RS-5538	180pF	90¢	80¢
RS-5540	220pF	90¢	80¢
RS-5542	270pF	90¢	80¢
RS-5544	330pF	90¢	80¢
RS-5546	390pF	90¢	80¢
RS-5548	470pF	90¢	80¢
RS-5550	560pF	90¢	80¢
RS-5552	680pF	90¢	80¢
RS-5554	820pF	90¢	80¢
RS-5556	1000pF	90¢	80¢
RS-5560	1500pF	\$1.00	90¢
RS-5562	2200pF	\$1.00	90¢
RS-5564	3300pF	\$1.20	\$1.00
RS-5568	5600pF	\$1.20	\$1.00



We buy our Polystyrene capacitors from several sources. The minimum voltage of any 'styro' is 50 volts and maybe as high as 630 volts, depending on capacitance value. We cannot guarantee to supply higher than 50 volts however.

Tag Tantalums

Cat. No	Type	1-9	10+
RZ-6620	0.1uF 35V	70¢	65¢
RZ-6622	0.22uF 35V	70¢	65¢
RZ-6624	0.33uF 35V	70¢	65¢
RZ-6626	0.47uF 35V	70¢	65¢
RZ-6628	1uF 35V	70¢	65¢
RZ-6630	1.5uF 35V	70¢	65¢
RZ-6632	2.2uF 35V	70¢	65¢
RZ-6634	3.3uF 35V	75¢	70¢
RZ-6640	4.7uF 35V	95¢	85¢
RZ-6645	6.8uF 35V	95¢	85¢
RZ-6650	10uF 25V	\$1.10	\$1.00
RZ-6655	10uF 35V	\$1.50	\$1.30
RZ-6657	15uF 16V	95¢	85¢
RZ-6658	22uF 16V	\$1.25	\$1.10
RZ-6665	33uF 16V	\$1.25	\$1.10
RZ-6670	47uF 16V	\$1.25	\$1.10
RZ-6675	100uF 3V	\$1.00	90¢
RZ-6678	100uF 16V	\$2.50	\$2.25



Tantalum Pack

Tantalums are getting more expensive all the time. Due to a very large bulk purchase, we can offer you a mixed pack of over 50 Tantalums. Over 40 of these are tag type, and the rest high quality military spec RT type which are worth up to \$5 each.

A typical pack will include: TAG STYLE 2 x 0.33/35V, 10 x 2.2/16V, 5 x 6.8/3V, 1 x 0.15/50V, 20 x 4.7/16V, 1 x 4.7/25V, 3 x 68/10V, 1 x 0.33/35V, 1 x 0.68/35V, 6 x 15/20V, 1 x 32/35V, 1 x 47/20V. We reserve the right to make changes if stock shortages occur. OVER 50 TANTALUMS FOR ONLY \$8.95

Over \$35 worth of Tag Tantalums alone without taking into account the expensive Milspec style also supplied.

Cat. RZ-6695

\$8.95 SAVE OVER 80%

Ceramic Pack

60 top quality prime spec 50V working ceramics. Values from 10pF to 0.1uF

Cat. RC-5399

PACK OF 60

\$5.95



Horizontal Trimmers

Cat. No	Type	1-9	10+
RV-5702	2.0 - 7.0pF BLUE	\$1.95	\$1.80
RV-5704	5.2 - 30pF GREEN	\$1.95	\$1.80
RV-5706	6.8 - 45pF YELLOW	\$1.95	\$1.80
RV-5728	9.8 - 60pF BROWN	\$1.95	\$1.80
RV-5743	0 - 20pF	\$1.40	\$1.30
RV-5744	0 - 120pF Compression	\$1.95	\$1.75
RV-5745	5 - 50pF Compression	\$1.50	\$1.00
RV-5745	25pF Beshive style SPECIAL	\$2.50	each



Trimmer Capacitor

Cat. No	Type	1-9	10+
RV-5726	4/40pF 80832409	\$1.25	\$1.10

FROM PHILIPS



Mini Tuning Capacitor

Cat. No	Type	1-9	10+
RV-5740	0-160 pF metal tuning gang	\$1.25	\$1.10
RV-5750	10-55.20	\$1.25	\$1.10



Tuning Gang

Quality Japanese brand SATO 0 - 100pF tuning gang.

Cat. RN-5736

\$3.95



Thermistor

NTC TYPE - 470 OHMS @ 25°C

Cat. RN-3450

50¢

10 up 45¢



Ceramic Filters

Cat. No	Type	1-9	10+
RC-5400	CSA5 06MTCSC 300k resonator	\$3.95	
RC-5402	SFD455D (5 legs)	\$2.95	\$2.75
RC-5403	BFB455 (2 legs)	\$.50	\$.40



Blue Chip Monolithic

Cat. No	Type	1-9	10+
RC-5480	0.01u 20¢	18¢	
RC-5490	0.1uF 25¢	20¢	
BUY IN BULK AND SAVE			
0.01uF Cat. RC-5495 PACK OF 100 \$12.50			
0.1uF Cat. RC-5496 PACK OF 100 \$16.50			



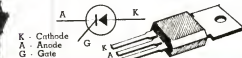
Transistors

Cat.	Type	Mat Pol	Case	Diss @25C	Vcb	Ic	Hfe	Hfe Bias	1-9	10+
Cat. ZT-2040	AC126 (AC125)	PNP	TO-1	150mW	32V	500mA	90		\$1.20	\$1.00
Cat. ZT-2110	BC327	PS	TO-92	500mW	50V	800mA	100	100mA	\$.30	\$.25
Cat. ZT-2112	BC328	PS	TO-92	500mW	50V	800mA	63	100mA	\$.30	\$.25
Cat. ZT-2115	BC337	NS	TO-92	500mW	50V	800mA	100	100mA	\$.30	\$.25
Cat. ZT-2116	BC338	NS	TO-92	500mW	30V	800mA	100	100mA	\$.30	\$.25
Cat. ZT-2150	BC546	NS	TO-92	300mW	80V	100mA	125	2mA	\$.65	\$.60
Cat. ZT-2152	BC547	NS	TO-92	300mW	50V	100mA	110	2mA	\$.15	\$.12
Cat. ZT-2154	BC548	NS	TO-92	300mW	30V	100mA	110	2mA	\$.15	\$.12
Cat. ZT-2156	BC549	NS	TO-92	300mW	30V	100mA	110	2mA	\$.15	\$.12
Cat. ZT-2158	BC549C	NS	TO-92	300mW	30V	100mA	420	2mA	\$.40	\$.35
Cat. ZT-2160	BC550	NS	TO-92	300mW	50V	100mA	240	2mA	\$.65	\$.60
Cat. ZT-2162	BC556	PS	TO-92	300mW	80V	100mA	75/450	2mA	\$.65	\$.60
Cat. ZT-2164	BC557	PS	TO-92	300mW	50V	200mA	75	2mA	\$.18	\$.15
Cat. ZT-2166	BC558	PS	TO-92	300mW	30V	100mA	74/475	2mA	\$.18	\$.15
Cat. ZT-2168	BC559	PS	TO-92	300mW	30V	200mA	125	2mA	\$.18	\$.15
Cat. ZT-2179	BC639	NS	TO-92	800mW	80V	1A	40	150mA	\$.70	\$.65
Cat. ZT-2180	BC640	PS	TO-92	800mW	80V	1A	40	150mA	\$.70	\$.65
Cat. ZT-2185	BCY71	PS	TO-18	350mW	45V	200mA	100	10mA	\$.95	\$.85
Cat. ZT-2187	BD135	NPN	40V version of BD139						\$.79	\$.70
Cat. ZT-2188	BD136	PNP	40V version of BD139						\$.79	\$.70
Cat. ZT-2189	BD139	NS	TO-126	6.5W	80V	1A	40/160	150mA	\$.75	\$.70
Cat. ZT-2190	BD140	NS	TO-126	6.5W	80V	1A	40/250	150mA	\$.95	\$.90
Cat. ZT-2192	BD682/BD262	PS	TO-126	36W	100V	6A	750	1.5A	\$1.80	\$1.62
Cat. ZT-2193	BD263/BD677	NS	TO-126	36W	100V	6A	750	1.5A	\$1.80	\$1.62
Cat. ZT-2198	BD649/BD679	NPN			100V	8A			\$1.95	\$1.70
Cat. ZT-2199	BD650	PNP			100V	8A			\$1.95	\$1.70
Cat. ZT-2205	BF494	NS	TO-92	300mW	30V	30mA	10	3mA	\$1.95	\$1.90
Cat. ZT-2209	BF495	PS	TO-126	1.8W	250V	200mA	50	25mA	\$1.50	\$1.40
Cat. ZT-2210	BF496	NS	TO-126	1.8W	250V	200mA	50	25mA	\$1.50	\$1.40
Cat. ZT-2215	BF884	NS	TO-3	100W	800V	10A	15	1.2A	\$4.65	\$4.45
Cat. ZT-2220	BU680	NPN	TO-3	DARLINGTON					\$12.95	\$9.00
Cat. ZT-2225	BU771	SIPMOS Powerfet							\$8.50	
Cat. ZT-2230	MJ15003	NS	TO-3	250W	140V	20A	25	5A	\$9.50	\$9.00
Cat. ZT-2231	MJ15004	PS	TO-3	250W	140V	20A	25	5A	\$9.50	\$9.00
Cat. ZT-2235	MJ2955	PS	TO-3	150W	100V	15A	5	10A	\$2.95	\$2.80
Cat. ZT-2235	MJE340	NS	TO-126	20W	300V	50mA	30/240	50mA	\$2.35	\$2.20
Cat. ZT-2260	MJE350	PS	TO-126	20W	300V	50mA	30/240	50mA	\$2.95	\$2.50
Cat. ZT-2275	MJE2955	PS	TO-220	90W	70V	10A	20/70	4A	\$1.95	\$1.80
Cat. ZT-2280	MJE3055	NS	TO-220	90W	70V	10A	20/70	4A	\$1.95	\$1.80
Cat. ZT-2281	OC377	MATCHED PAIR WITH OC332							\$.30	\$.40
Cat. ZT-2282	OC332	MATCHED PAIR WITH OC377							\$.50	\$.40
Cat. ZT-2285	TP13	NS	TO-220	40W	40V	3A	20/100	1A	\$1.20	\$1.10
Cat. ZT-2290	TP132	PS	TO-220	40W	40V	3A	20/100	1A	\$1.20	\$1.10
Cat. ZT-2292	TP122	NPN	TO-220	60W	100V	200VA	1000	3A	\$1.75	\$1.60
Cat. ZS-2294	VN88AF								\$4.95	\$4.65
Cat. ZT-2295	2N2907	PNP	60V 600mA (BC557)		60V	800mA	100	150mA	\$.95	\$.85
Cat. ZT-2298	2N2222A	NS	TO-92	500mW	60V	700mA	50	150mA	\$1.95	\$1.75
Cat. ZT-2299	2N2907	NS	TO-3	115W	100V	15A	20/70	4A	\$2.25	\$2.00
Cat. ZT-2300	2N3055	NS	TO-3	117W	160V	10A	20/70	3A	\$5.50	\$5.25
Cat. ZT-2305	2N3442	NS	TO-3	117W	160V	10A	20/70	3A	\$5.50	\$5.25
Cat. ZT-2309	2N3565	NS	TO-92	200mW	30V	50mA	70	0.1mA	\$.65	\$.55
Cat. ZT-2310	2N3566	NS	TO-105	300mW	40V	200mA	150	10mA	\$.95	\$.85
Cat. ZT-2314	PN3568	NPN	60V 500mA		50V	30A	15/60	10A	\$8.25	\$7.85
Cat. ZT-2315	2N3569	NS	TO-92	300mW	80V	500mA	100	150mA	\$.68	\$.60
Cat. ZT-2320	2N3638	PS	TO-92	300mW	25V	500mA	30	50mA	\$.53	\$.48
Cat. ZT-2325	2N3643	NS	TO-92	350mW	60V	500mA	100	150mA	\$.45	\$.40
Cat. ZT-2330	2N3645	PS	TO-92	300mW	60V	500mA	115	50mA	\$.65	\$.55
Cat. ZT-2333	2N3771	NS	TO-3	150W	50V	30A	15/60	10A	\$8.25	\$7.85
Cat. ZT-2338	2N4250	PS	TO-92	200mW	40V	100mA	250min	1mA	\$.45	\$.40
Cat. ZT-2340	2N4258	PS	TO-92	200mW	12V	500mA	30/120	10mA	\$.75	\$.65
Cat. ZT-2366	2N5416	PNP	TO-3	300V	10A	1A			\$.60	\$.45
Cat. ZT-2398	2N6211	PNP	TO-66		275V	2A			\$1.00	\$.80
Cat. ZT-2400	2N5245A	NS	TO-92						\$2.95	\$2.75
Cat. ZT-2510	2SC1507/1569		TO-220	HF TRANSISTOR					\$1.50	\$1.00



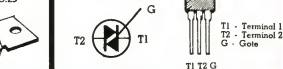
SCR's

Cat. No	Type	Volt/Amp	1-9	10+
ZX-7006	1C06D1	400V 4A	\$1.95	\$1.75
ZX-7008	1C03B	200V 800mA	\$1.75	\$1.60
ZX-7010	1C06V1	30V 4A	\$1.20	\$1.10
ZX-7012	1C22E	600V 8A	\$3.50	\$3.25



TRIAC's

Cat. No	Type	Volt/Amp	1-9	10+
ZX-7141	SC141D	400V 6A	\$1.85	\$1.70
ZX-7145	SC151D	400V 15A	\$2.50	\$2.35
ZX-7147	TAQ225	400V 8A	\$2.25	\$2.10



Multi-replacement Common Transistors

Jaycar have available two transistors which will replace a multitude of common hard to get devices.

PN100 is NPN general purpose medium power amp and switch with continuous collector current up to 500mA.

PN200 is PNP general purpose amplifier at collector currents to 1A. Both are TO-18 plastic package.

PN100 replaces PN2221.

PN2222, PN2222A, PN3565, PN3568,

PN3569, PN3643, PN5133, 2N2212A,

2N2222A, 2N3414, 2N3415, 2N3416,

2N3417, 2N3700, 2N3704, 2N3904,

2N4123, 2N4124, 2N4401, 2N5085

and 2N5210.

Cat. ZT-2283

25c ea 10+ 22c ea

PN200 replaces PN2907,

PN2907A, PN3638, PN3638A,

PN3640, PN3644, PN4121, PN4143,

PN4248, PN4249, PN4250, PN4355,

PN4916, PN4917, PN5910, PN5910A,

2N3467, 2N3702, 2N3906, 2N4125,

2N4126, 2N4201, 2N4402, 2N4403,

2N5086, 2N5087, 2N5447

Cat. ZT-2284

25c ea

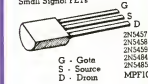
10+ 22c ea



FET's, UJT's

2S149	P channel Mosfet	Cat. ZT-2449	\$10.95	\$9.95
2S156	P channel Mosfet	Cat. ZT-2450	\$14.95	\$13.95
2S161	N channel Power Mosfet	Cat. ZT-2454	\$10.95	\$9.95
2S176	N Mosfet	Cat. ZT-2455	\$13.95	\$13.50
2S177	N channel JFET	Cat. ZT-2262	\$1.35	\$1.25
2S178	N channel JFET	Cat. ZT-2265	95c	85c
2S179	N channel JFET	Cat. ZT-2266	\$1.40	\$1.30
2N5245	N channel JFET	Cat. ZT-2360	\$1.95	\$1.75
2N5484	N channel JFET	Cat. ZT-2375	\$1.20	\$1.10
2N5485	N channel Dual Gate Mosfet	Cat. ZT-2227	\$4.20	\$3.89
2N5486	Unijunction Transistor	Cat. ZT-2297	\$1.40	\$1.20
2N5487	Programmable Unijunction	Cat. ZT-2297	\$1.35	\$1.25
2N5488	Dual N channel JFET	Cat. ZT-2228	\$29.50	\$27.50

Small Signal FET's



DIAC's

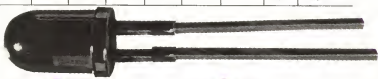
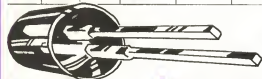
Cat. No	Type	1-9	10+
ZX-7190	S71	\$1.25	\$1.15
ZX-7192	S72	\$1.25	\$1.15

Light Emitting Diodes



See data section for information on how to power LEDs from 240V mains or high volt DC sources

Cat. No	Size	Colour	Lens Colour	Brightness (mCd)	Absolute Maximum Ratings				Electro-Optical Characteristics				Price	10 up
					$\Delta\lambda$ (nm)	Pd (mw)	If(mA)	Peak If(mA)	Vf(V)		Rec If(mA)			
									Min.	Typ.		Max.		
ZD-1740	3mm	Red	Red	0.5	40	110	40	200	1.5	1.7	2.0	10-20	28e	25e
ZD-1745	3mm	Green	Green	3.5	30	100	30	160	1.7	2.1	2.8	10-20	32e	28e
ZD-1750	3mm	Yellow	Yellow	2.5	35	85	20	160	1.7	2.0	2.8	10-20	32e	28e
ZD-1752	3mm	Red	Water Clear	120	20	110	40	200	1.5	1.7	2.0	10-20	99e	90e
ZD-1710	5mm	Red	Red	0.9	40	110	40	200	1.5	1.7	2.0	10-20	25e	22e
ZD-1715	5mm	Green	Green	25	30	100	30	160	1.7	2.1	2.8	10-20	35e	30e
ZD-1720	5mm	Yellow	Yellow	2.5	35	85	20	160	1.7	2.0	2.8	10-20	35e	30e
ZD-1725	5mm	Orange	Orange	3.5	45	100	30	160	1.7	2.0	2.8	10-20	35e	30e
ZD-1790	5mm	Red	Water Clear	300	20	110	40	200	1.5	1.7	2.4	10-20	79e	70e
ZD-1792	5mm	Red	Water Clear	500	20	110	40	200	1.5	1.7	2.4	10-20	\$2.50	\$2.30
ZD-1793	5mm	Red	Water Clear	1000	20	110	40	200	1.5	1.7	2.4	10-20	\$4.95	\$4.50
ZD-1794	5mm	Green	Water Clear	80		125	50	50		2.1	2.5	20	\$1.50	\$1.40
ZD-1795	5mm	Yellow	Water Clear	160		125	50	50		2.1	2.5	20	\$1.90	\$1.80
ZD-1735	5mm	Tri-Colour	Water Clear										95e	85e
ZD-1780	5mm PCB	Red	Red	1.6	90	45	15	50	1.7	2.1	2.8	5-10	48e	42e
ZD-1781	5mm PCB	Green	Green	5.0	30	100	30	160	1.7	2.1	2.8	10-20	48e	42e
ZD-1782	5mm PCB	Yellow	Yellow	5.0	35	85	20	160	1.7	2.0	2.8	10-20	48e	42e
ZD-1783	5mm PCB	Orange	Orange	5.0	35	100	30	160	1.7	2.0	2.8	10-20	48e	42e
ZD-1956	10mm	Red	Red	3.8	90	45	15	50	1.7	2.1	2.8	10-20	\$1.95	\$1.80
ZD-1957	10mm	Green	Green	15	30	100	30	160	1.7	2.1	2.8	10-20	\$1.95	\$1.80
ZD-1958	10mm	Yellow	Yellow	13	35	85	20	160	1.7	2.0	2.8	10-20	\$1.95	\$1.80
ZD-1959	10mm	Orange	Orange	15	45	100	30	160	1.7	2.0	2.8	10-20	\$1.95	\$1.80
ZD-1760	5x2mm	Red	Red	0.5	90	45	15	45	1.7	2.1	2.8	5-10	40e	35e
ZD-1765	5x2mm	Green	Green	1.0	30	100	30	100	1.7	2.1	2.8	10-20	40e	35e
ZD-1770	5x2mm	Yellow	Yellow	1.0	35	85	20	85	1.7	2.0	2.8	10-20	40e	35e



Flashing LEDs

All 5mm, 3.5 volt operation.
Pulse rate 2Hz. 1.2mCd at 3 volts.
Available in 3 colours.

RED Cat. ZD-1730
GREEN Cat. ZD-1731
YELLOW Cat. ZD-1732

\$1.50 ea

10 or more \$1.35 each



Infra Red LEDs and Diodes



ZD-1945 CQY89 IR LED
1-9 \$1.85 10+ \$1.75

ZD-1950 BPW50 type IR diode
1-9 \$3.75 10+ \$3.25

LED Mounting Hardware

5mm Clips

Black with interlocking collar.
Cat. HP-1102 packet 20

\$2.20

Cat. HP-1103 packet 100

\$8.95

5mm Bezels

The great new LED Bezels are made of black plastic and are supplied in 2 parts. Simply push part A into the panel (you will need a 10mm hole), then put the LED into part B and insert part B (with LED) into part A for a tight fit. You end up with a very professional LED bezel at about 1/4 the price of chrome ones. ALSO, if you have the need for a hole in a panel up until now it has been extremely hard to disguise it. Simply mount one of these without the LED. Ideal for internal mounted buzzers, lamps, etc.

Cat. HP-1105 packet 10

\$2.99

Cat. HP-1106 packet 100

\$26.95

3mm Clips

Black, requires a 4mm panel hole. Simply push clip into panel and insert LED.

Cat. HP-1100 Cat. HP-1101

\$2.20 pk 20 **\$8.95** pk 100



7 Segment Displays

LT303 Common Cathode
Cat. ZD-1803

LT302 Common Anode
Cat. ZD-1802

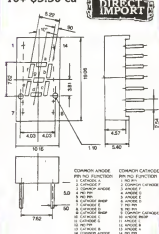
• Peak wavelength 700

• 1V (uBe)

• IF max 10

\$3.50 ea

10+ \$3.30 ea



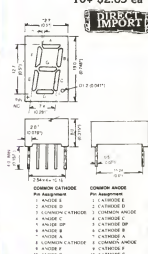
7 Segment Displays

FND500/LTS543R/S505RWB
Common Cathode
Cat. ZD-1855

FND507/LTS542R/S506RWB
Common Anode

Cat. ZD-1857 **\$2.85 ea**

10+ \$2.65 ea

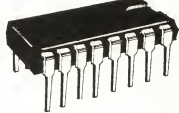


Low Power Schottky 74LS

Cat. No.	Type	Pin	Description	1-9	10+
ZS-5000	74LS00	14	Quad 2 input NAND gate	80¢ 75¢	
ZS-5001	74LS01	14	Quad 2 input NAND gate (oc)	80¢ 75¢	
ZS-5002	74LS02	14	Quad 2 input NOR gate	80¢ 75¢	
ZS-5003	74LS03	14	Quad 2 input NAND gate (oc)	90¢ 80¢	
ZS-5004	74LS04	14	Hex inverter	80¢ 75¢	
ZS-5005	74LS05	14	Hex inverter (oc)	80¢ 75¢	
ZS-5008	74LS08	14	Quad 2 input AND gate	80¢ 75¢	
ZS-5009	74LS09	14	Quad 2 input AND gate (oc)	80¢ 75¢	
ZS-5010	74LS10	14	Triple 3 input NAND gate	80¢ 75¢	
ZS-5011	74LS11	14	Triple 3 input AND gate	80¢ 75¢	
ZS-5012	74LS12	14	Triple 3 input NAND gate (oc)	\$1.00 90¢	
ZS-5013	74LS13	14	Dual 4 input schmitt trigger NAND gate	80¢ 75¢	
ZS-5014	74LS14	14	Hex schmitt trigger	80¢ 75¢	
ZS-5015	74LS15	14	Dual 4 input NAND gate	80¢ 75¢	
ZS-5021	74LS21	14	Dual 4 input AND gate	\$1.10 \$1.00	
ZS-5022	74LS22	14	Triple 3 input NOR gate	80¢ 54¢	
ZS-5030	74LS30	14	Single 8 input NAND gate	\$1.00 90¢	
ZS-5032	74LS32	14	Quad 2 input OR gate	\$1.10 \$1.00	
ZS-5033	74LS33	14	Quad 2 input NOR gate (oc)	\$1.00 90¢	
ZS-5042	74LS42	14	1 of 10 decoder	\$1.50 \$1.40	
ZS-5047	74LS47	16	BCD to 7 segment decoder/driver (oc)	\$1.50 \$1.40	
ZS-5048	74LS48	16	BCD to 7 segment decoder/driver	\$2.95 \$2.70	
ZS-5049	74LS49	14	BCD to 7 segment decoder/driver (oc)	\$2.95 \$2.70	
ZS-5073	74LS73	14	Dual JK flip-flop with clear	\$1.50 \$1.40	
ZS-5074	74LS74	14	Dual D flip-flop with CLR	\$1.50 \$1.40	
ZS-5075	74LS75	14	4 bit bi-stable latch	\$1.50 \$1.40	
ZS-5076	74LS76	16	Dual JK flip-flop with preset and clear	\$1.20 \$1.10	
ZS-5078	74LS78	14	Dual JK flip-flop with common clear	\$1.90 \$1.80	
ZS-5083	74LS83	16	4 bit full adder	\$1.90 \$1.70	
ZS-5085	74LS85	16	4 bit magnitude comparator	\$1.25 \$1.15	
ZS-5096	74LS96	14	Quad 2 input exclusive OR gate	\$1.45 \$1.35	
ZS-5099	74LS99	14	Decade counter	\$1.45 \$1.35	
ZS-5092	74LS92	14	Divide by 12 counter	\$1.50 \$1.15	
ZS-5093	74LS93	14	4 bit binary counter	\$1.25 \$1.15	
ZS-5095	74LS95	14	4 bit shift register	\$1.45 \$1.35	
ZS-5107	74LS107	14	Dual JK flip-flop	\$1.45 \$1.35	
ZS-5109	74LS109	16	Dual JK edge triggered flip-flop	\$1.25 \$1.15	
ZS-5112	74LS112	16	Dual JK edge triggered flip-flop	\$1.25 \$1.15	
ZS-5123	74LS123	14	Retriggerable monostable multivibrator	\$1.50 \$1.40	
ZS-5122	74LS122	16	Dual retriggerable monostable with clear	\$1.45 \$1.35	
ZS-5125	74LS125	14	Quad tri-state buffer	\$1.25 \$1.15	
ZS-5126	74LS126	14	Quad tri-state buffer	\$1.20 \$1.10	
ZS-5138	74LS138	16	1 of 8 decoder/demultiplexer	\$1.50 \$1.50	
ZS-5139	74LS139	16	Dual 1 of 4 decoder/demultiplexer	\$1.45 \$1.35	
ZS-5147	74LS147	16	8 input to 3 line priority encoder	\$3.45 \$3.30	
ZS-5148	74LS148	16	8 input to 3 line priority encoder	\$3.95 \$3.50	
ZS-5151	74LS151	16	Single 8 input multiplexer	\$1.20 \$1.10	
ZS-5153	74LS153	16	Dual 4 input multiplexer	\$1.20 \$1.10	
ZS-5155	74LS155	16	Dual 1 of 4 decoder/demultiplexer	\$1.85 \$1.75	
ZS-5156	74LS156	16	Dual 1 of 4 decoder/demultiplexer	\$1.95 \$1.85	
ZS-5157	74LS157	16	Quad 2 input 1 multiplexer (non-invert)	\$1.40 \$1.30	
ZS-5158	74LS158	16	Quad 2 input multiplexer (invert)	\$1.40 \$1.30	
ZS-5160	74LS160	16	BCD decade counter (sync. reset)	\$1.50 \$1.40	
ZS-5161	74LS161	16	4 bit binary counter (sync. reset)	\$1.50 \$1.40	
ZS-5162	74LS162	16	BCD decade counter (sync. reset)	\$1.25 90¢	
ZS-5163	74LS163	16	4 bit binary counter (sync. reset)	\$1.60 \$1.50	
ZS-5164	74LS164	16	8 bit shift register (ser. in/per. out)	\$1.40 \$1.30	
ZS-5165	74LS165	16	8 bit shift register (per. in/se. out)	\$2.80 \$2.70	
ZS-5173	74LS173	16	4 bit tri-state D register	\$3.25 \$2.00	
ZS-5174	74LS174	16	Hex D flip-flop with clear	\$1.40 \$1.30	
ZS-5175	74LS175	16	Quad D flip-flop with clear	\$1.65 \$1.50	
ZS-5190	74LS190	16	Up/down decade counter	\$1.85 \$1.75	
ZS-5191	74LS191	16	Up/down binary counter	\$1.85 \$1.65	
ZS-5192	74LS192	16	Up/down decade counter with dual clock	\$1.65 \$1.50	
ZS-5193	74LS193	16	Up/down binary counter with dual clock	\$1.95 \$1.85	
ZS-5194	74LS194	16	4 bit bi-directional shift register	\$1.50 \$1.40	
ZS-5195	74LS195	16	4 bit parallel access shift register	\$1.85 \$1.75	
ZS-5196	74LS196	14	Pre-settable decade counter	\$2.95 \$2.50	
ZS-5221	74LS221	16	Dual monostable multivibrator	\$2.95 \$2.65	
ZS-5240	74LS240	20	Octal tri-state buffer (inverting)	\$2.20 \$2.00	
ZS-5241	74LS241	20	Octal tri-state buffer (non-inverting)	\$2.20 \$2.00	
ZS-5243	74LS243	14	Quad Bus Transceivers	\$2.95 \$2.65	
ZS-5244	74LS244	20	Octal tri-state line driver/receiver	\$2.95 \$2.65	
ZS-5245	74LS245	20	Octal tri-state bus transceiver	\$2.95 \$2.65	
ZS-5257	74LS257	16	Quad 2 input tri-state multiplexer	\$1.50 \$1.40	
ZS-5258	74LS258	16	Quad 2 input tri-state multiplexer	\$1.75 \$1.65	
ZS-5259	74LS259	16	8 bit addressable latch	\$2.90 \$2.25	
ZS-5266	74LS266	14	Quad exclusive NOR gate (oc)	\$1.25 \$1.15	
ZS-5273	74LS273	20	Octal flip-flop with clear	\$2.95 \$2.70	
ZS-5352	74LS352	16	Inverting LS353	\$1.50 \$1.00	
ZS-5365	74LS365	16	Hex buffer common enable (non-invert)	\$1.25 \$1.15	
ZS-5366	74LS366	16	Hex buffer common enable (inverting)	\$1.25 \$1.15	
ZS-5367	74LS367	16	Hex buffer 4 bit and 2 bit	\$2.95 \$1.15	
ZS-5368	74LS368	16	Hex inverter 4 bit and 2 bit	\$1.60 \$1.50	
ZS-5373	74LS373	20	Octal transparent tri-state latch	\$2.95 \$2.70	
ZS-5374	74LS374	20	Octal tri-state D flip-flop	\$2.95 \$2.70	
ZS-5393	74LS393	14	Dual 4 bit binary counter	\$3.50 \$3.15	
ZS-5629	74LS629	16	Voltage controlled oscillator	\$6.50 \$6.00	
			Replaces 74LS224		

Linear IC

Cat. No.	Type	Pin	Description	1-9	10+
ZL-3061	TL061	8	1 x low power JFET op-amp	\$ 2.45	\$2.20
ZL-3062	TL062	8	2 x low power JFET op-amp	\$ 2.95	\$2.65
ZL-3064	TL064/LF444	14	4 x low power JFET op-amp	\$ 5.50	\$5.30
ZL-3071	TL071/LF351	8	1 x low noise JFET op-amp	\$ 1.50	\$1.35
ZL-3072	TL072/LF353	8	2 x low noise JFET op-amp	\$ 2.50	\$2.30
ZL-3074	TL074/LF347	14	4 x low noise JFET op-amp	\$ 5.50	\$5.30
ZL-3075	TL075	14	4 x low noise JFET op-amp	\$ 7.50	\$7.00
ZL-3084	LM084	14	J FET Op amp	\$ 3.20	\$3.00
ZL-3301	LM301	8	High performance op-amp	\$.95	\$.85
ZL-3307	LM307	8	High performance comparator	\$ 1.50	\$1.40
ZL-3308	LM308	8	Precision op-amp	\$ 2.20	\$2.10
ZL-3311	LM311	8	Voltage comparator	\$ 1.80	\$1.70
ZL-3318	LM318H	8	High performance op-amp	\$ 4.95	\$4.25
ZL-3324	LM324	14	4 x low power op-amp	\$ 1.40	\$1.30
ZL-3326	LM326	14	Dual true voltage regulator	\$ 5.95	
ZL-3334	LM334Z	3	Adjustable current source	\$ 3.75	\$3.45
ZL-3339	LM339	14	4 x low power comparator	\$ 1.20	\$1.10
ZL-3348	LM348	14	Quad 741 Op amp	\$ 1.85	\$ 1.65
ZL-3350	LM350	5	Hybrid amplifier (40-550MHz)	\$19.95	
ZL-3380	LM380	8	Audio power amplifier	\$ 2.85	\$2.60
ZL-3381	LM381N	14	Low noise dual pre-amplifier	\$ 4.75	\$4.50
ZL-3382	LM382	14	Low noise dual pre-amplifier	\$ 3.45	\$2.95
ZL-3386	LM386N-1	8	Low voltage 1 watt amplifier	\$ 2.40	\$1.75
ZL-3393	LM393	8	Low power dual comparator	\$ 1.95	\$1.76
ZL-3394	LM394CH	8	Supermatched transistor pair	\$ 8.95	\$8.50
ZL-3495	LM7555	8	CMOS timer	\$ 2.50	\$1.75
ZL-3555	NE555	8	Timer	\$.70	\$.55
ZL-3556	NE556	8	Dual timer	\$ 1.45	\$1.25
ZL-3565	LM565	8	PLL	\$ 2.50	
ZL-3567	LM567	8	Function generator	\$ 3.45	\$3.15
ZL-3571	NE571	8	Low power tone decoder	\$ 2.40	\$1.75
ZL-3572	NE572	16	Comander	\$ 6.50	\$6.00
ZL-3709	UA709	14	Stereo compander IC	\$ 9.95	
ZL-3710	UA709HC	14	Op-amp (14 pin)	\$1.25	\$1.05
ZL-3741	LM741	8	Op-Amp metal round	\$1.25	\$1.05
ZL-3747	LM747	14	General purpose op-amp	\$.75	\$.65
ZL-3748	LM748	14	Dual general purpose op-amp	\$ 2.25	\$2.00
ZL-3753	LM1458N	8	Single Op-amp	\$.75	\$.65
ZL-3917	LM2917	8	Dual op-amp	\$ 1.50	\$1.30
ZL-3758	MC 3334P	14	Frequency to voltage converter	\$ 4.20	\$3.78
ZL-3762	CA3028	8	Ignition IC	\$12.95	
ZL-3763	LM3900	8	Operns transconductance amp	\$ 4.50	\$4.20
ZL-3832	CA3130E	8	Minilop op-amp	\$ 2.50	\$2.30
ZL-3834	CA3100E	8	Minilop op-amp	\$ 3.50	\$3.25
ZL-3840	LM3140	8	Wideband op-amp	\$ 4.95	\$4.65
ZL-3756	MC1496Q	10	Op-amp	\$ 1.95	\$1.85
ZL-3900	LM3900	14	Op-amp	\$ 4.40	\$1.50
ZL-3909	LM3909	14	LED flasher/oscillator	\$ 1.65	\$1.45
ZL-3911	LM3911	18	Temperature controller	\$ 5.50	\$5.25
ZL-3914	LM3914	18	LED bar/dot driver (linear)	\$ 6.50	\$5.95
ZL-3915	LM3915	18	LED bar/dot driver (logarithmic)	\$ 6.50	\$5.95
ZL-3936	LM4136	14	Quad high performance op-amp	\$ 2.75	\$2.50
ZL-3958	LM4558	14	Dual high performance op-amp	\$ 1.50	\$1.35
ZL-3970	LM5534N	8	Low noise op-amp	\$ 2.75	\$2.50
ZL-3971	LM5534AN	8	Ultra low noise op-amp	\$ 3.95	\$3.25
ZL-3990	TM414	3	Low power AM radio chip	\$ 2.75	\$2.50
ZL-3995	BA1404	18	FM stereo transmitter IC	\$ 8.75	



TTL

Cat. No.	Type	Pin	Description	1-9	10+
ZS-5802	7402	14	Quad 2 input NOR gate	\$1.00	90¢
ZS-5804	7404	14	Hex inverter	\$1.00	90¢
ZS-5806	7406	14	Hex inverter with high voltage AC o/p	\$1.20	\$1.10
ZS-5807	7407	14	Hex buffer with high voltage AC o/p	\$1.20	\$1.10
ZS-5821	74121	14	One shot	\$1.50	\$1.40
ZS-5837	7437	14	Quad 2 input NAND-NOR	80¢	75¢
ZS-5834	7454	14	4 wide 2 input NAND-OR-INVERT gate	80¢	75¢
ZS-5875	7475	16	4 bit bistable latch	\$1.50	\$1.40
ZS-5896	74196	14	Pre-settable decade/binary counter	\$2.75	\$2.60
ZS-5950	75451	8	Dual Peripheral Pos & Driver	\$1.00	80¢

CMOS

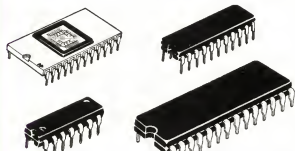
Cat No	Part	Pins	Description	1-9	10+
ZC-4000	4000	14	Quad 3 input NOR gate + inverter	80¢	75¢
ZC-4001	4001	14	Dual 2 input NOR gate	60¢	55¢
ZC-4002	4002	14	Dual 4 input NOR gate	80¢	75¢
ZC-4006	4006	14	18 stage static CMOS register	\$1.35	\$1.20
ZC-4007	4007	14	Dual complementary pair + inverter	80¢	75¢
ZC-4008	4008	16	4 bit full adder	\$1.35	\$1.20
ZC-4009	4009	16	Hex buffer (inverting)	\$1.50	\$1.40
ZC-4010	4010	16	Hex buffer (non-inverting)	\$1.25	\$1.15
ZC-4011	4011	14	Quad 2 input NAND gate	60¢	55¢
ZC-4012	4012	14	Dual 4 input NAND gate	\$1.00	90¢
ZC-4013	4013	14	Dual D flip-flop	90¢	81¢
ZC-4014	4014	16	8 stage static shift register	\$1.75	\$1.55
ZC-4015	4015	16	Dual 4 bit static shift register	\$1.45	\$1.25
ZC-4016	4016	14	Quad bi-lateral switch	\$1.75	\$1.55
ZC-4017	4017	14	Decade counter/divider	\$1.75	\$1.55
ZC-4018	4018	16	Presetable divide by N counter	\$1.95	\$1.75
ZC-4019	4019	16	Quad AND-OR select gate	95¢	85¢
ZC-4020	4020	16	14 stage ripple-carry counter/divider	\$1.75	\$1.55
ZC-4021	4021	16	8 stage static shift register	\$1.95	\$1.85
ZC-4022	4022	16	Divide by 8 counter/divider	\$1.95	\$1.85
ZC-4023	4023	14	Triple 3 input NAND gate	95¢	85¢
ZC-4024	4024	14	7 stage ripple-carry counter/divider	\$1.18	\$1.08
ZC-4025	4025	14	Triple 3 input NOR gate	80¢	75¢
ZC-4026	4026	16	Decade counter with 7 segment output	\$1.95	\$1.75
ZC-4027	4027	16	Dual JK flip-flop	\$1.25	\$1.10
ZC-4028	4028	16	BCD to decimal decoder	\$1.95	\$1.85
ZC-4029	4029	16	Presetable binary/decade up/down counter	\$1.85	\$1.75
ZC-4030	4030	14	Quad 2 IP exc. OR gate	\$1.65	\$1.50
ZC-4040	4040	16	12 stage ripple-carry binary counter	\$1.65	\$1.50
ZC-4042	4042	16	Quad locked D latch	\$1.20	\$1.10
ZC-4046	4046	16	Micropower phase locked loop (PLL)	\$2.20	\$2.10
ZC-4047	4047	14	Monostable/astable multivibrator	\$1.75	\$1.60
ZC-4049	4049	16	Hex buffer (inverting)	\$1.00	90¢
ZC-4050	4050	16	Hex buffer (non-inverting)	90¢	82¢
ZC-4051	4051	16	Single 8 channel analog multiplexer	\$1.75	\$1.60
ZC-4052	4052	16	Dual 4 channel analog multiplexer	\$1.95	\$1.80
ZC-4053	4053	16	Triple 2 channel analog multiplexer	\$1.95	\$1.80
ZC-4056	4056	14	Quad bi-lateral switch	\$1.20	\$1.10
ZC-4058	4058	14	Single 8 input NAND gate	80¢	75¢
ZC-4059	4059	14	Hex inverter	90¢	85¢
ZC-4070	4070	14	Quad 2 input exclusive NOR gate	90¢	85¢
ZC-4071	4071	14	Quad 2 input OR gate	95¢	85¢
ZC-4073	4073	14	Triple 3 input AND gate	80¢	70¢
ZC-4075	4075	14	Triple 3 input NOR gate	80¢	75¢
ZC-4076	4076	14	Quad D flip-flop	\$1.20	\$1.10
ZC-4077	4077	14	Quad 2 input exclusive NOR gate	80¢	75¢
ZC-4078	4078	14	Single 8 input NOR gate	80¢	75¢
ZC-4081	4081	14	Quad 2 input AND gate	80¢	75¢
ZC-4082	4082	14	Quad 4 input AND gate	80¢	75¢
ZC-4093	4093	14	Quad 2 input NAND schmitt trigger	\$1.50	\$1.40
ZC-4419	4419	16	20B8 keyed-Binary encoder	\$4.50	\$4.00
ZC-4426	4426	16	Decade counter with 7 segment output	\$2.90	\$2.70
ZC-4501	4501	16	Triple gate	\$1.95	\$1.80
ZC-4502	4502	16	Strobed hex inverter	\$1.95	\$1.80
ZC-4503	4503	16	Hex non-inverting 3 stage buffer	95¢	85¢
ZC-4510	4510	16	BCD up/down counter	\$1.95	\$1.75
ZC-4511	4511	16	BCD to 7 segment decoder/divider	\$2.45	\$2.30
ZC-4512	4512	16	8 channel data selector	\$1.95	\$1.80
ZC-4518	4518	16	Dual BCD up counter	\$2.20	\$2.00
ZC-4520	4520	16	Dual binary up counter	\$2.20	\$2.00
ZC-4526	4526	16	Programmable divide by N counter	\$2.35	\$2.20
ZC-4528	4528	16	Dual monostable multivibrator	\$1.95	\$1.85
ZC-4538	4538	16	Dual precision monostable multivibrator	\$2.65	\$2.50
ZC-4543	4543	16	BCD to 7 segment decoder/divider	\$1.95	\$1.80
ZC-4572	4572	16	Hex gate	\$1.95	\$1.85
ZC-4582	4582	16	Look ahead carry block	\$2.90	\$2.80
ZC-4583	4583	16	Logic schmitt trigger	\$1.50	\$1.25
ZC-4594	40194	16	4 bit bidirectional universal shift register	\$4.75	\$4.20
ZC-4800	74HC00	14	Quad 2 input NAND gate	\$.75	\$.65
ZC-4802	74HC02	14	Quad 2 input NOR gate	\$.75	\$.65
ZC-4804	74HC04	14	Hex inverter	\$.75	\$.65
ZC-4820	74HC11	14	Triple 3 input AND gate	\$.75	\$.65
ZC-4850	74HC139	16	Dual 1 of 4 decoder/demultiplexer	\$1.25	\$1.10
ZC-4870	74HC368	16	Hex inverter 4 bit and 2 bit	\$2.95	\$2.70
ZC-4874	74HC373	20	Octal transparent tri-state latch	\$2.95	\$2.70
ZC-4880	74HC393	14	Dual 4 bit binary counter	\$2.95	\$2.70
ZC-4886	74HC4075	14	Quad 2 input NAND gate	\$.95	\$.85
ZC-4900	74C00	14	Quad 2 input NOR gate	\$1.40	\$1.30
ZC-4902	74C02	14	Quad 2 input NOR gate	\$1.40	\$1.30
ZC-4914	74C14	14	Hex schmitt trigger (or 40106 or 4584)	\$1.85	\$1.65
ZC-4921	74C221	16	Dual monostable multivibrator	\$3.95	\$3.50
ZC-4922	74C922	16	16 key encoder	\$9.50	
ZC-4926	74C926	18	4 digit counter with 7 segment output	\$17.50	



CPU Memory

SPECIAL FUNCTIONS

Cat. No.	Part	Pins	Description	1-9	10+
Cat. ZZ-8000	Z80A CPU	40	Central processing unit	\$ 9.95	\$ 5.75
Cat. ZZ-8005	Z80A CTC	28	Clock/timer/control cont.	\$ 6.95	\$ 6.50
Cat. ZZ-8010	Z80A PIO	40	Parallel input/output cont.	\$ 5.95	\$ 5.75
Cat. ZZ-8015	Z80A SIO	40	Serial input/output cont.	\$14.95	\$14.50
Cat. ZZ-8020	Z80A SIO1	40	Serial input/output cont.	\$12.95	\$12.50
Cat. ZZ-8025	Z80A SIO2	40	Serial input/output cont.	\$ 9.95	\$ 9.50
Cat. ZZ-8030	Z80A DMA	40	Direct memory access cont.	\$14.95	\$14.50
Cat. ZZ-8035	Z80A DART	40	Dual async. rec/trans	\$12.50	\$12.00
Cat. ZZ-8036	Z80 CTC	28	1.7MHz	\$ 2.00	\$ 1.50
Cat. ZZ-8048	6800	40	CPU	\$ 4.00	\$ 3.00
Cat. ZZ-8040	6502	40	Central processing unit	\$14.95	\$14.50
Cat. ZZ-8050	6802	40	Central processing unit	\$15.95	\$13.95
Cat. ZZ-8055	6805	40	8/16 bit microprocessor	\$ 9.95	\$ 8.95
Cat. ZZ-8056	6810	24	A RAM	\$ 2.50	\$ 2.00
Cat. ZZ-8061	6821	40	Peripheral interface	\$ 9.95	\$5.50
Cat. ZZ-8063	6845	40	CRT controller	\$12.00	
Cat. ZZ-8065	6850	40	Asynchronous Comm Intd	\$ 7.00	
Cat. ZZ-8072	CDP1822	22	8 bit Dec (sim DAC08)	\$11.50	\$10.50
Cat. ZZ-8080	MC1408L8	16		\$ 3.95	\$ 3.50
Cat. ZZ-8082	BT-26A/68680A	16	Quad Data Bus	\$ 1.95	\$ 1.50
Cat. ZZ-8148	1488	16	RS-232 line driver	\$ 1.50	\$ 1.35
Cat. ZZ-8149	1489	14	RS-232 line receiver	\$ 1.50	\$ 1.35
Cat. ZZ-8155	8255N	40	Parallel peripheral interface	\$ 9.95	\$ 8.95
Cat. ZZ-8195	81L595	20	Octal buffer	\$ 3.20	\$ 2.90
Cat. ZZ-8198	81C90	20	Octal buffer	\$ 3.90	\$ 3.70
Cat. ZZ-8208	93A8	16		\$33.95	
Cat. ZZ-8414	212-5	16	Binary to Hex 7 seg driver	\$ 2.50	
Cat. ZZ-8416	4116	16	16k x 1 static M 350ns	\$ 4.95	\$ 4.50
Cat. ZZ-8420	4116	16	16k x 1 dynamic RAM 150ns	\$ 4.95	\$ 4.50
Cat. ZZ-8424	4116	16	16k x 1 dynamic RAM	\$ 4.95	\$ 4.50
Cat. ZZ-8424	4116	16	64k x 1 dynamic RAM 120ns	\$ 9.95	\$ 9.25
Cat. ZZ-8430	6116	24	2k x 8 static CMOS RAM	\$12.95	\$12.50
Cat. ZZ-8435	41256	16	256K RAM 150ns/sec	\$22.00	\$20.00
Cat. ZZ-8440	6264	28	RAM	\$22.00	\$20.00
Cat. ZZ-8450	2708	24	EPROM	\$ 6.95	\$ 6.50
Cat. ZZ-8454	2716	24	2K x 8 EPROM single 5V	\$13.50	\$12.50
Cat. ZZ-8459	2732A	24	EPROM	\$10.95	\$ 9.95
Cat. ZZ-8460	2732	24	4K x 8 EPROM single 5V	\$10.95	\$ 9.95
Cat. ZZ-8464	2764	28	8K x 8 EPROM single 5V	\$ 9.50	\$ 9.00
Cat. ZZ-8468	2728	28	EPROM	\$13.95	\$13.50
Cat. ZZ-8470	27256	28	EPROM	\$22.95	\$21.95
Cat. ZZ-8810	8250N-8	40	UART split IBM serial	\$22.95	\$21.50
Cat. ZK-8801	MN3001	40	2 x 512 static bucket brigade	\$24.50	
Cat. ZK-8805	A7-3-1015D	40	UART	\$11.95	
Cat. ZK-8832	S-576A	8	240V AC lamp cont.	\$11.95	
Cat. ZK-8830	XR2200	16	Function generator chip	\$12.00	
Cat. ZK-8831	XR2211	14	Phase lock loop	\$11.50	
Cat. ZK-8832	XR2240	16	Prog counter/timer	\$ 4.25	\$ 3.85
Cat. ZK-8834	MC10116	16	Triple differential line rec	\$ 2.95	
Cat. ZK-8836	CD201	16	CJ interrupt	\$ 2.00	\$ 1.80
Cat. ZK-8840	ICM7216A	28	Freq counter/display driver	\$79.50	
Cat. ZK-8850	UA494	16	Switchmode power cont	\$ 5.95	
Cat. ZK-8855	ULN2003N	16	Solenoid driver	\$ 2.95	\$ 2.65
Cat. ZK-8865	AM7910	28	World chip modem	\$29.95	
Cat. ZK-8868	MC14411	16	8 bit rate generator	\$ 8.00	\$ 6.00
Cat. ZK-8869	MC14412	16	Modem	\$10.00	\$ 8.00
Cat. ZK-8880	MC14450	16	Hex CD eliminator	\$ 2.00	\$ 1.50
Cat. ZK-8950	AD590	16	Temperature sensor	\$13.50	\$11.50



V20 (uPD70108)

8/16 bit high performance CMOS microprocessor - 8MHz.
Replace the 8086 or 8088-2 in your IBM PC compatible and increase its power by
up to 40%! Add in plain plastic DIP case.

Cat. ZZ-8070

\$23.95 10 up \$22.50 ea

AD590 Temperature Sensor

As used in ETI Temperature Probe kit. Cat. ZK-8950

\$13.50 ea \$11.50 10+

Opto Couplers

Cat. ZD-1920	MOC3020/ MOC3021 Triac opto coupler
1-9 \$3.45	10+ \$3.20
Cat. ZD-1928	4N28/4N25 Opto coupler
1-9 \$1.50	10+ \$1.30
Cat. ZD-1940	6N138 Opto coupler
1-9 \$8.50	10+ \$8.00

6N138 Low saturation voltage, high gain output Vcc = 7V max. * Typical data rate (NRZ) 300k bit/s * Current transfer ratio 300% min * Specified input current 1.6mA * Withstand test voltage 3000Vdc 4N28 Darlington output Vcc = 7V max * Typical data rate (NRZ) 3k bit/s * Current transfer ratio 250% min * Specified input current 1.0mA * Withstand test voltage 2500Vdc.

6N138



"Spy in the Sky" Sensor

The Pyroelectric infra red sensor element is the 'eye' of a passive infra red detector. It measures 10mm high, 9mm wide and only 6mm deep. The sensor comes complete with full technical data including performance graphs. Information on the operating principle and two typical application circuits!

Typical applications:

- Burglar alarms
- Proximity detectors
- Automatic door/shutter switch
- Toys, robotics
- Accident prevention/machine guard

Electronic appliances
Automatic lighting (in toilet?)
Cat. ZR-9500

\$19.95



MAX 231

14 pin dual RS-232 transmitter/receiver. Meets all EIA RS232 specs. Operates from +5V to +12V. 2 drivers and 2 receivers. Onboard voltage converter. ±30V input levels. Low power CMOS: 5mA. Suited for computers, peripherals, instruments, modems, battery powered systems.

Cat. ZK-8823

\$12.95

Wire Wrap Machined IC Sockets SEE PLUGS & SOCKETS PAGES ELSEWHERE IN THIS CATALOGUE

Production IC Sockets

GOLD INSERT - MACHINED PIN - ANTI WICKING

Ideal for professional/portable or field service equipment.

Cat. No.	Pins	1-9	10+
PI-6452	8	\$1.00	90¢
PI-6454	16	\$1.35	\$1.25
PI-6456	16	\$1.50	\$1.35
PI-6458	18	\$1.65	\$1.50
PI-6460	20	\$1.90	\$1.80
PI-6462	22	\$2.00	\$1.85
PI-6464	24	\$2.30	\$2.10
PI-6466	28	\$2.60	\$2.40
PI-6468	40	\$3.25	\$3.00

MADE IN WEST GERMANY
ALL GOLD INSERT MACHINE PIN
GUARANTEED NOT TO WICK!



Production Low Cost IC Sockets

PCB MOUNT SOLDER TAIL

Cat. No.	Pins	1-9	10+
PI-6500	8	20¢	18¢
PI-6501	14	25¢	22¢
PI-6502	16	28¢	25¢
PI-6503	18	32¢	28¢
PI-6504	20	48¢	44¢
PI-6505	22	50¢	45¢
PI-6506	24	50¢	45¢
PI-6507	28	70¢	65¢
PI-6508	40	70¢	65¢

All tin plated Phosphor Bronze or Beryllium Copper



MAX 232

16 pin dual RS232 receiver/transmitter. For new designs, the MAX232CPE makes an excellent replacement for 1488 and 1489. Features: * meets all EIA RS232 specs * generates ±9V output from 5V supply * highly useful when ±12V supply is required for RS232 drivers, but is not available * ±30V input levels * also converts RS232 levels to TTL levels * 2 inputs * 2 outputs Cat. ZK-8824

\$13.95

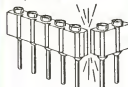


Machine Pin IC Socket Strips

What a great idea. If you are a serviceman or hobbyist you don't have to keep every size of IC socket handy. Just keep a few of these and snap them off to make any length.

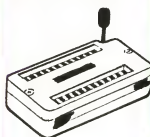
* Quality machine pins * 32 pins per length.
Cat. PI-6470

\$3.50 per length
10+ \$3.25 ea



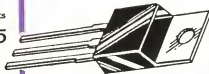
ZIF (Zero Insertion Force) Sockets

Cat. No.	Pins	1-9	10+
PI-6522	24	\$21.95	\$20.50
PI-6523	28	\$26.95	\$23.50



Voltage Regulators

Cat. No.	Type	Volt	Amp	Case	1-9	10+
ZV-1505	7805/LM340T5	+5V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1506	7806/LM340T6	+6V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1508	7808/LM340T8	+8V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1512	7812/LM340T12	+12V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1515	7815/LM340T15	+15V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1524	7824/LM340T24	+24V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1525	7905/LM320T5	-5V fixed	1A	TO-220	\$1.65	\$1.50
ZV-1532	7912/LM320T12	-12V fixed	1A	TO-220	\$1.65	\$1.50
ZV-1535	7915/LM320T15	-15V fixed	1A	TO-220	\$1.65	\$1.50
ZV-1539	78L05 low power	+5V	300mA	80¢	60¢	
ZV-1605	LM309K/7805KC	+5V fixed	1.5A	TO-3	\$4.95	\$4.75
ZV-1610	LM317K	+1.2-37V adj	1.5A	TO-3	\$7.00	\$6.75
ZV-1615	LM317T	+1.2-37V adj	1.5A	TO-220	\$2.40	\$2.30
ZV-1620	LM337T	-1.2-37V	1.5A	TO-220	\$2.95	\$2.75
ZV-1624	LM336-2.5	2.5V ref	10mA	TO-92	\$3.95	\$3.75
ZV-1625	LM337K	-2.3V adj	3A	TO-3	\$10.95	\$9.95
ZV-1635	LM350K	+1.2-32V adj	3A	TO-3	\$9.90	\$8.95
ZV-1645	LM396K	+1.5-15V	10A	TO-3	\$32.50	\$31.00
ZV-1675	LM723	±2.37V	150mA	TO-5	\$1.95	\$1.65
ZV-1676	LM723CN	±2.37V	150mA	14 DIL	\$1.50	\$1.40



Texas Instr. TL-172C Hall Switch

This device is a TO-92 normally off electronic switch that utilizes the Hall Effect to sense the presence of a magnetic field. The TL-172C is actually an integrated circuit with signal conditioning, hysteresis functions and output transistor on the one chip. A magnetic field of sufficient strength is sufficient to switch the TL-172C into a low impedance (on conduction) state.

SPECS:
Vcc = +7V * Output voltage = 30V
* Output current = 20mA * Temp 0 - 70°C * Drive TTL level, transistor triac etc.
Data sheet supplied with unit if requested.

Cat. ZH-8902 **\$5.00** ea
10+ \$4.50 ea

Velostat

Non-static sheeting for storing CMOS, IC's, LSI's, etc. Will store up to 150 IC's on one sheet - reusable.
Size: 225 x 150mm
Cat. ZV-9998

\$5.95

PERSONAL SHOPPERS

Don't forget to call early in the month to buy your new copy of Silicon Chip and Electronics Australia. We generally have them available before they arrive in newsgroups.

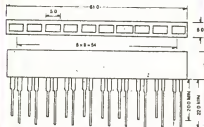
LED Bar Graph

This bar graph has 7 green and 3 red rectangular 5mm x 2.5mm LEDs mounted in a black housing. Ideal for VU meters or where any easy visual clipping level is required. Cat. ZD-1702

\$4.95 ea 10+ \$4.70 ea

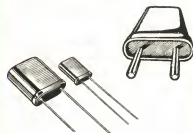
ALSO AVAILABLE IN ALL RED LEDs
Cat. ZD-1700

\$4.95 ea 10+ \$4.70 ea



Crystals

Cat. No	Type	Price
RQ-5260	1.000MHz (HC-18(D))	\$14.95
RQ-5264	1.8432MHz (HC-18(K))	\$ 9.50
RQ-5268	2.000MHz (HC-18(K))	\$ 8.50
RQ-5269	2.4576MHz	\$ 8.50
RQ-5271	3.000MHz (HC-18(K))	\$ 5.50
RQ-5272	3.5795MHz	\$ 4.00
RQ-5274	4.000MHz (HC-18(K))	\$ 5.50
RQ-5277	4.433619MHz (HC-18(K))	\$ 5.50
RQ-5280	4.9152MHz (HC-18(K))	\$ 5.50
RQ-5283	5.000MHz (HC-18(K))	\$ 5.50
RQ-5285	8.000MHz	\$ 5.50
RQ-5286	8.867238MHz (HC-18(K))	\$ 5.50
RQ-5289	10.000MHz (P) (HC-18(K))	\$ 5.50
RQ-5291	10.6956MHz (HC-18(K))	\$ 1.95
RQ-5292	12.000MHz (HC-18(K))	\$ 5.50
RQ-5294	16.000MHz (HC-18(K))	\$ 5.50
RQ-5296	20.000MHz (HC-18(K))	\$ 5.50
RQ-5298	38kHz Miniature crystal used in Mini Mixer kit	\$ 6.75



Economical Diode Packs

100 x 1N4004 1A 400V Rectifier
Cat. ZR-1005 \$7.50
100 x 1N4007 1A 1000V Rectifier
Cat. ZR-1008 \$14.00
100 x 1N914 Signal Diodes
Cat. ZR-1105 \$4.95

Zener Diode Bargain Packs

• packet of 25 pieces of 12 volt 1 watt.
A very common Zener Diode.
Cat. ZR-1370

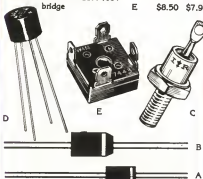
\$2.95 SAVE \$5.80

• 50 pieces of a 6 volt 500mW Zener
Cat. ZR-1372

\$2.50 SAVE \$10

Diodes

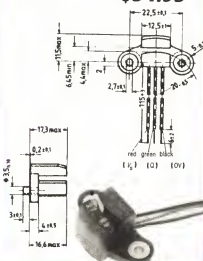
Cat. No	Type	Case 1-9	10+
ZR-1004	1N4004 1A 400V	A . 12c	10c
ZR-1007	1N4007 1A 1000V	A . 20c	17c
ZR-1014	1N5404 3A 400V	8 . 35c	30c
ZR-1018	1N5408 3A 1000V	8 . 50c	45c
ZR-1024	1N5407 6A 1000V	8 . \$1.50	\$1.30
ZR-1028	8Y225 Fast rectifier	A . \$3.20	\$3.00
ZR-1036	6A 1000V stud mount	C . \$2.50	\$2.20
ZR-1040	10A 100V stud mount	C . \$5.50	\$5.25
ZR-1100	1N914/1N4148 signal	A . 10c	8c
ZR-1112	8A102/8B119 Varicap	A . \$1.20	\$1.10
ZR-1122	8AW62	A . 29c	25c
ZR-1124	8B212 AM varicap dbt	A . \$5.75	\$5.50
ZR-1130	8R100	A . 90c	90c
ZR-1141	OA91 Germanium	A . 40c	35c
ZR-1160	5062 - 2800	A . \$3.20	\$3.10
ZR-1304	W04 1.2A 400V bridge	D . \$1.0	90c
ZR-1314	P04 6A 400V bridge	D . \$3.35	\$3.20
ZR-1324	MDA3504 35A 400V bridge	E . \$8.50	\$7.95



HKZ101 Hall Effect Vane Switched Device

This device manufactured by Siemens in Germany consists of a Hall Effect semiconductor sensor separated across a small gap by a magnet. In its normal state the Hall sensor (with inbuilt output transistor) is conducting. It will sink up to 40mA between the impressive temperature range of -30 to +130°C. When an iron vane is introduced into the gap between the Hall element and the magnet, the output transistor switches off. The HKZ-101 is hermetically sealed, resistant to petroleum products and incorporates metal bushed mounting holes to facilitate fitting to a carrier plate, bracket, etc. It is ideal as the commutator for an electronic ignition, however it has many other uses in other areas. Lead connections Red V+; Green Signal (on/off); Black earth.
Cat. ZD-1900

\$34.95



Zener Diodes

Cat. No	Volts	Type	Watts
ZR-1398	3V3	1N4728	1
ZR-1399	3V6	1N4729	1
ZR-1400	3V9	1N4730	1
ZR-1401	4V3	1N4731	1
ZR-1402	4V7	1N4732	1
ZR-1403	5V1	1N4733	1
ZR-1404	5V6	1N4734	1
ZR-1405	6V2	1N4735	1
ZR-1406	6V8	1N4736	1
ZR-1407	7V5	1N4737	1
ZR-1408	8V2	1N4738	1
ZR-1409	9V1	1N4739	1
ZR-1410	10V	1N4740	1
ZR-1411	11V	1N4741	1
ZR-1412	12V	1N4742	1
ZR-1413	13V	1N4743	1
ZR-1415	15V	1N4744	1
ZR-1416	16V	1N4745	1
ZR-1418	18V	1N4746	1
ZR-1420	20V	1N4747	1
ZR-1422	22V	1N4748	1
ZR-1424	24V	1N4749	1
ZR-1427	27V	1N4750	1
ZR-1430	30V	1N4751	1
ZR-1433	33V	1N4752	1
ZR-1436	36V	1N4753	1
ZR-1439	39V	1N4754	1

39¢ ea

**10 or more
35¢ each**

ZR-1475	75V	1N4761	1W
\$1.50 ea 10+ \$1.40 ea			
ZR-1450	15V	1N5328	5W
\$1.50 ea 10+ \$1.40 ea			
ZR-1445	6.8V		5W
\$1.00 ea 10+ 80¢ ea			
ZR-1440	12V	1N5398	5W
\$1.50 ea 10+ \$1.40 ea			

Photo Interrupter

This device enables you to turn a circuit on and off optically. It consists of a moulded plastic housing with an IR LED facing a phototransistor across a gap. Any object in the gap will interrupt the IR beam and consequently switch the phototransistor on and off. The device is very fast and ideal for counting, timing or sensing.

FEATURES:
• PCB or chassis mounting • Low cost •
Rugged one piece construction • Very fast
APPLICATION:

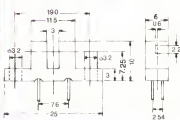
• Counter sensor • Tachometer • Opto
Ignition • Edge sensor • Tape end sensor
Full specs supplied with each unit.
Cat. ZD-1901

\$8.95 ea

10+ \$7.95 ea



DIRECT IMPORT



Jaycar Introduces the Easy Way to Buy 1/4 Watt Resistors

Don't ever be short of that resistor again. Jaycar now has available 7 different packs of 1/4 Watt 5% resistors available. Each pack contains 10 of each value, and packs cover the complete range from 1 ohm to 10M ohms.

Cat. RR-1690

Values 1, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2 Ohms - Total 120

Cat. RR-1691

Values 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82 Ohms - Total 120

Cat. RR-1692

Values 100, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 820 Ohms - Total 120

Cat. RR-1693

Values 1k, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2k Ohms - Total 120

Cat. RR-1694

Values 10k, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82k Ohms - Total 120

Cat. RR-1695

Values 100k, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 820k - Total 120

Cat. RR-1696

Values 1M, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2, 10M Ohms - Total 130

ALL PACKS ARE \$3.95 ea

SAVE \$22.55 over buying individual parts

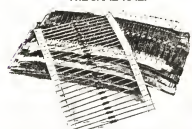
1 pack of each of the above, 7 packs in all giving a total of 850 resistors 10 of each value.

Cat. RR-1697

VALUE AT \$19.95

SAVE \$7.70 OVER BUYING INDIVIDUAL PACKS

A GREAT WAY TO NEVER BE OUT OF THAT ODD RESISTOR AND SAVE A PACKET AT THE SAME TIME!



1/4 Watt Resistors

Over 300 1/4W 5% 1st grade resistors are supplied in this pack. We supply more of the popular values. From 10 ohms to 10M ohms.

Cat. RR-1690

OVER 300 IN PACK

\$6.50



JAYCAR INTRODUCE THE EASY WAY TO BUY COMPONENTS - PACKS

Metal Film Resistors

150 quality 1% 1/4W 50ppm resistors supplied. More common values supplied.

Cat. RR-0650

150 IN PACK

\$6.95

Resistor Networks

50 assorted values - top quality, 10 lead resistor networks. This pack would normally be worth \$40 - values range from 680 ohms to 1M.

Cat. RR-3380

50 IN PACK

\$10

That's 20¢ per network!



Mixed Pots

A pack of at least 35 potentiometers which includes slider pots - single and dual, an assortment of pots and tab style pots with assorted shafts and a selection of quality 5mm vertical sealed trim pots and open 5mm horizontal styles. This represents excellent value at only \$10.

Cat. RP-3902

\$7.50



Slider Pots

You don't see this very often. A pack of 20 slides in assorted values between 5k and 500k. 20 for \$10. That's less than 5¢ each! The majority in the pack are dual gang which have been selling for \$5.50 each. A typical pack includes values such as 5k, 50k, 100k, 250k and 500k in 45 and 60mm lengths in single and dual styles.

Cat. RP-3903 **\$7.50**



Jaycar Introduces the Easy Way to Buy Greencaps

Don't ever run short of that greencap again. 5 easy to buy, low cost packs which represent a considerable saving over individual prices. Each pack contains 10 of each value and packs cover the complete range from 0.001µF to 0.1µF.

Cat. RG-5000

Values: 0.001, 0.0012, 0.0015, 0.0018, 0.0022 - Total 50

Cat. RG-5001

Values: 0.0027, 0.0033, 0.0039, 0.0047, 0.0056 - Total 50

Cat. RG-5002

Values: 0.0068, 0.0082, 0.01, 0.012, 0.015 - Total 50

Cat. RG-5003

Values: 0.018, 0.022, 0.027, 0.033, 0.039 - Total 50

**ABOVE PACKS
\$6.95 each**

Cat. RG-5004

Values: 0.047, 0.056, 0.068, 0.082, 0.1 - Total 50

ABOVE PACK \$9.95

A GREAT WAY TO NEVER BE OUT OF THAT ODD GREENCAP AND SAVE A PACKET AT THE SAME TIME



Ceramic Capacitor Packs

Now you can buy ceramics in packs, so you'll never run out of one again. Eight, easy to buy, low cost packs which represent a considerable saving over buying individual parts. At 18¢ each ceramic, you figure out the savings. Each pack contains 10 of each value and packs cover the complete range from 1pF to 0.1µF.

Cat. RC-5390

Values: 1pF, 1.2, 1.5, 1.8, 2.2, 2.7 - Total 60

Cat. RC-5391

Values: 3.3pF, 3.9, 4.7, 5.6, 6.8, 8.2 - Total 60

Cat. RC-5392

Values: 10pF, 12, 15, 18, 22, 27 - Total 60

Cat. RC-5393

Values: 33pF, 39, 47, 56, 68, 82 - Total 60

Cat. RC-5394

Values: 100pF, 120, 150, 180, 220, 270 - Total 60

Cat. RC-5395

Values: 330pF, 390, 470, 560, 680, 820 - Total 60

Cat. RC-5396

Values: .001µF, .0022, .0033, .0047, .0056, .0068 - Total 60

**ALL ABOVE PACKS
\$6.95 each**

Cat. RC-5397

Values: .0082µF, .01, .022, .033, .047, .1 - Total 60

ABOVE PACK \$7.50



3AG Fuseclips

The easy way to secure fuses on a PCB.

PACKET OF 8

Cat. SZ-2022

\$1.20 pkt

10+ \$1.00 per pkt

PACKET OF 100

Cat. SZ-2023

\$10.95



Fuse Packs

The economical way to buy fuses.

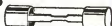
3AG PACK

Consists of: 4 x 500mA, 8 x 1A, 6 x 1.5A, 2 x 2A, 6 x 3A, 4 x 5A, 2 x 7.5A, 4 x 10A.

Cat. SF-2240

40 FUSES TOTAL VALUE \$12.00

ONLY \$8.95



M205 PACK

5 x 500mA, 10 x 1A, 10 x 2A, 5 x 3A, 5 x 5A, 10A

Cat. SF-2242

40 FUSES \$12.00 VALUE

ONLY \$8.95



TO-220

Insulating Kit

Mica washers and bushes for TO-220 or any flat pack transistors.

Cat. HP-1142

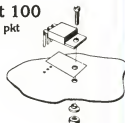
95¢ pkt 4

10+ 85¢ per pkt

Cat. HP-1140

\$14.50 pkt 100

10+ \$13.50 per pkt



TO-3

Insulating Kit

Mica washers and bushes for TO-3 style.

Cat. HP-1122

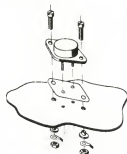
\$1.30 pkt 4

10+ \$1.20 per pkt

Cat. HP-1120

\$24.95 pkt 100

10+ \$23.00 per pkt



LEDs

PACKS OF 100 UNITS

5mm RED

Cat. ZD-1690

\$15.50

3mm RED

Cat. ZD-1692

\$19.50

Assorted pack consisting of 20 x 5mm red, 20 x 5mm mixed (green, yellow, orange), 40 x 3mm red, 20 x 3mm mixed (green, yellow, orange) **BONUS** 10 x 5mm mounting hardware **AT NO CHARGE.**

Cat. ZD-1694

\$19.50



3mm LED Clips

Black, requires a 4mm panel hole. Simply push clip into panel and insert LED.

Cat. HP-1100

\$2.20 pkt 20

Cat. HP-1101

\$8.95 pkt 100



5mm LED Clips

Black with interlocking collar.

Cat. HP-1102

\$2.20 pkt 20

Cat. HP-1103

\$8.95 pkt 100



Unbelievable Solderless Lug Pack

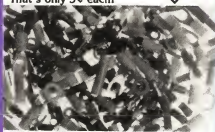
Another surplus buy. A bag of approximately 200 assorted insulated solderless terminals. Included are ring terminals in many different sizes, lug terminals, cable joiners, and solderless lugs to connect into terminal block. These normally cost between 15 and 30¢ each. We estimate the normal price of these parts would be around \$50.

LIMITED QUANTITY

Cat. TH-1210

\$10

That's only 5¢ each!



Drill Bits

4 high speed steel drill bits, 0.6, 0.8, 1 and 1.2mm for drilling holes in steel, non ferrous metals, wood and plastic.

Cat. TH-1904

\$8.50



IC Socket - Packs

The economical way to buy quality timed IC sockets.

100 x 8 PIN

Cat. PI-6478

\$15.50

100 x 14 PIN

Cat. PI-6480

\$16.95

100 x 16 PIN

Cat. PI-6482

\$19.95

100 x 18 PIN

Cat. PI-6484

\$23.95



MIXED PACK IC SOCKETS

Consists of:

15 x 8 pin • 20 x 14 pin • 20 x 16 pin • 10 x 18 pin • 5 x 20 pin • 10 x 22 pin • 5 x 24 pin • 5 x 28 pin • 10 x 40 pin

more of the more common values.

Cat. PI-6490

(\$37.00 value)

\$24.95 pkt of 100

Bargain Bags

Contains approximately 3kg of assorted electronic goodies - "JUNK" if you like, but all brand new components etc. Ideal to fill up your junk box. We expect to have these available at most times, but availability does depend on how much junk we find. Unfortunately, due to the massive weight p&p is normal rates plus \$5.00.

Cat. XB-9000

\$12.95

Contact Connectors

Packs of easy to use automatic connectors. Simply wrap around the existing wire and new wire and squeeze. Connector cuts through insulation and makes contact without damaging the conductor. Fully insulated once on.

Cat. HP-1206

\$1.25 pkt 4

Cat. HP-1207

SPECIAL \$2.95 pkt 15

Cat. HP-1208

SPECIAL \$12.50 pkt 100



Assorted Heatshrink Pack

Handy assortment of high quality heatshrink tubing in red and black. Sizes from 1.5mm to 10mm.

10 pieces in all of 300 and 150mm length.

Cat. WH-5525

\$6.95



Tantalum Capacitor Pack

Tantalums are getting more expensive all the time. Due to a very large bulk purchase, we can offer you a mixed pack of over 50 Tantalums. Over 40 of these are tag type, and the rest are high quality military spec RT style which are worth up to \$5 each.

A typical pack contains: TAG STYLE 2 x 0.33/35V, 10 x 2.2/16V, 5 x 6.8/6.3V, 1 x 0.15/50V, 10 x 4.7/16V, 1 x 4.7/25V, 3 x 68/100V, 1 x 100/16V, RT STYLE 1 x 0.1/35V, 1 x 0.22/35V, 1 x 0.33/35V, 1 x 0.68/35V, 6 x 15/20V, 1 x 32/35V, 1 x 47/20V. We reserve the right to make changes if stock shortage occur. OVER 50 TANTALUMS FOR ONLY \$8.95. Over \$35 worth of tag Tantalums alone, without taking into account the expensive Milspec style also supplied.

Cat. RZ-6695 **\$8.95**



Mixed Capacitor Pack

Don't miss this bargain!

This pack contains approximately 150 assorted capacitors. Not junk values, most are normal stock lines. Here's what you get: RT Electro

1µF, 4.7µF, 25µF, 100µF, 220µF, 470µF most 63V, 10,000µF 16V
RB Electro 1µF, 2.2µF, 25µF, 47µF
Greenpac 100V - 0.0022µF, 0.01, 0.22, 1µF
Greenpac 630V - 0.022µF, 0.1µF
Ceramic 4.7pF, 47pF, 220pF, 470pF, 0.022µF
Polystyrene 220pF, 820pF, 2200pF
1kV Ceramic 330pF, 470pF, 680pF

PLUS LOTS MORE

150 SPEC CAPACITORS

FOR \$10

THAT'S ONLY 6.6¢ EACH -
SAVE 84%

At our current prices these caps are worth \$61!

Cat. RE-6260

We reserve the right to make changes to this pack if stock shortages occur.

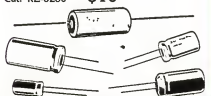


Mixed Electrolytic Capacitor Pack

Another absolute bargain. This pack contains approximately 80 assorted RB/RT style electrolytics. Most are standard stock lines. Here is what a typical pack contains: µF values: 1, 2, 10, 22, 25, 47, 100, 150, 220, 470, 680, 4700, 10000 Volts: 6.3, 10, 16, 25, 35, 50, 50, 63, 250.

A great asset for your parts bin. OVER 80 CAPACITORS FOR \$10. That's only 12.5¢ each. Our cheapest stock electro costs 28¢, and some supplied in this pack cost as much as \$3 each! We reserve the right to make changes to this pack if stock shortages occur.

Cat. RE-6280 **\$10**



Electrolytic Pack

55 quality, most RB types, electrolytics supplied. Values range from 1µF to 470µF. Voltages from 16 to 63.

55 IN PACK

Cat. RE-6250 **\$6.50**



Greencap Pack

Metallised Polyester. 60 top quality prime spec greencaps supplied. From 0.001µF to 0.22µF, all 100V.

60 IN PACK

Cat. RG-5199 **\$7.95**

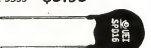


Ceramic Pack

60 top quality prime spec 50V working ceramics. Values from 10pF to 0.1µF.

60 IN PACK

Cat. RC-5399 **\$5.95**



Blue Chip Capacitors

Extremely small 50V high quality ceramic type. Low inductance for bypass applications. 0.01µF PACK OF 100

Cat. RC-5495 **\$12.50**

0.1µF PACK OF 100

Cat. RC-5496 **\$16.50**



PCB Pins

Pins and sockets for easy termination of wire on PCB boards.

PIN - 0.9mm

Cat. HP-1250

\$1.90 pkt 50

10+ \$1.70 per pkt



Molex Pins

Make your own IC (or other) sockets to any length! Will take up to 0.5mm diameter wire or pins. Simply insert and break off carrier strip. New style, half of last years price.

Cat. PI-6541

\$2.25 pkt 100



Transistor Pack

100 mixed BC series transistors. More of the common ones.

Consists of:

15 x BC547 • 20 x BC548 • 20 x BC549 • 15 x BC557 • 15 x BC558 • 15 x BC559

Cat. ZT-2170

100 IN PACK

\$11.95



Diode Packs

1N914

Signal diode

Cat. ZR-1105

PACK OF 100

\$4.95

1N4004

1A 400V

Rectifier diode

Cat. ZR-1005

PACK OF 100

\$7.50

1N4007

1A 1000V

Rectifier diode

Cat. ZR-1008

PACK OF 100

\$14



Zener Diode Bargain Packs

Packet of 25 pieces of 12 volt 1 watt. A very common Zener diode.

Cat. ZR-1370

PACKET OF 25

\$2.95 SAVE \$5.80

50 pieces of a 6 volt 500mW Zener.

Cat. ZR-1372

PACKET OF 50

\$2.50 SAVE \$10



Bargain RF Choke Pack

Over 50 pieces supplied!

A pack of 30 brand new RF chokes with at least 14 different values! Popular values include: 1.5, 4.7, 12, 15, 18, 22, 68, 100 & 1000µH. Each choke is resin dipped and colour coded (they look like bead tantalums). A colour coding chart is supplied so that you can decipher the value.

BONUS: Not only do you get 30 useful chokes we will give you at no extra charge at least another 30 more RF choke! These are genuine chokes but are commonly called 'peaking coils'! They look like a 1/2 watt resistor. (Read the choke value in µH as you would a resistor value.)

We reserve the right to make changes if stock shortages occur.

Cat. RC-5600

ONLY \$5

Less than 5¢ a part.



Make Printed Circuit Boards from Magazine pages with "PHOTO ETCH™" Printed Circuit Kit ER-4

The REVOLUTIONARY Photographic way that makes perfect printed circuits from original artwork or a magazine page!

NO

CAMERA DARKROOM FILM CUTTING TRACING

It's so simple! The ER-4 Photo Etch Kit contains all the chemicals necessary for any hobbyist, engineer or student to create professional circuit boards. Use this kit to generate your own 1:1 artwork or use magazine art, then use the patented Pos-Neg process to make a photo negative, sensitize and expose a blank copper board, develop and etch it. The magazine page is not destroyed in the process. No darkroom or camera is required. All necessary materials and tools are included: 5 x 6 Print Frame, 4 sheets photo copy film (ER5), 16oz. resist developer (ER8), 4oz. negative-acting etch resist (ER71), 2 blank copper circuit boards (ER11), dry concentrated etchant (ER3), film developer and fixer (ER9).

DETAILS OF KIT CONTENTS:

• 120 x 148mm steel printing frame with glass and backboard • Pos-Neg™ yellow filter • 4 sheets photocopy film • 450ml each of film developer and fixer • 100 grams negative photo resist liquid • 200 grams resist developer • 120 x 148mm and 76 x 114mm copper clad circuit boards • 500 grams anhydrous Ferric Chloride • 2 sheets polyester drafting film • 1 roll each 1.5mm and 0.75mm tape • 8 sheets dry transfer direct PC patterns including donor pads, lines, jogs, DIP and round can IC's, transistors, edge card connectors • 12 page instruction book.

Cat. NC-4260

\$99.00

REMEMBER! You only need 1:1 artwork or 1:1 artwork from a magazine page and you can have your own copy of the PCB! The artwork or the magazine page is not destroyed in the process.



Spare chemicals/material to enhance your PCB production capability

**DIRECT
IMPORT**

Film Developer & Fixer Replacement Pack ER-6

Contains three packets of chemicals to make 450ml of high contrast lithographic film developer and 450ml acid fixer. Handles up to 15 sheets of 125 x 150mm Pos-Neg film.

Cat. NC-4264

\$10.95

Copying Film ER-5 or ER-9

This polyester base film is dimensionally stable and is capable of making a negative or a positive from either opaque or translucent artwork in one step. No intermediate film is required. Exposing is done through a yellow filter to obtain a positive image from a positive original. Negatives are prepared with a yellow, then a white light exposure. One film surface is matte. It will accept retouching with photo opaque, pencil, India ink or dry transfers. Film is handled under subdued room light and exposed with a photoflood light source. Complete instructions and yellow filter are contained in the ER-4 and ER-10.

Supplied in two sizes: ER-5 gives you 6 sheets 125 x 150mm in a light proof bag. You can use the print frame supplied with the ER-4 kit or use the larger ER-10 Cat. NC-4280 frame.

Cat. NC-4270 6 sheets 125 x 150mm **\$17.95**

ER-9 gives you 2 sheets 200 x 275mm. (The ER-10 print frame or similar contact print frame must be used).

Cat. NC-4272 2 sheets 200 x 275mm **\$17.95**

Large Contact Printing Exposure Frame

Large format (225 x 300mm) spring-loaded steel printing frame will accept 215 x 275mm artwork originals, photocopy film and sensitized printed circuit boards. Comes complete with glass, backboard, yellow Pos-Neg™ filter and instruction manual.

Cat. NC-4280

\$34.95

PCB Etch Resist (ER-71)

A liquid cinnamate resist in bottle with pump sprayer. May also be flowed on. The coated board is exposed to UV through a negative of the circuit pattern, then developed in ER-8 liquid. Unexposed parts of the resist coat are dissolved, while the exposed resist pattern stays to protect the copper when etched. One bottle coats over 1 square metre.

Cat. NC-4266 118ml

\$18.95

Etch Resistant (ER-71) Developer ER-8

A solvent blend that will develop ER-71 and other negative-acting photo resists. Resist areas that are not hardened by UV light are dissolved away. Hardened areas are unaffected. Similar to Kodak KPR which can be used in its place.

Cat. NC-4267 473ml

\$11.95

Copper PCB Tin Plating Solution (ER-18) Electrolysis

TINNIT is designed to plate bare copper circuit boards to enhance solderability. It has also been used to plate edge card connector fingers on prototypes when a low, stable contact resistance is needed, but gold is not available or desired. The 450ml size of TINNIT will plate up to 0.4 metre of copper with approximately 0.01mm of bright tin. Plating is complete after about 10 minutes in a fresh solution. Adhesion and solderability are excellent. No electricity is required; the material tends to plate any metal that is chemically more active than tin and is not oxidised by the plating bath. TINNIT has been successfully used to plate brass, bronze, iron and some carbon steels. The material is supplied as a dry mixture with an indefinite shelf life. When mixed with water, the solution has a life of approximately two months. You need add no acid or other materials to this solution. TINNIT contains all plating chemicals plus surfactants and cleaners to insure a perfect plate.

Cat. NC-4276 Makes 450ml

\$11.95

As demand for greater PCB density increases so does the need for a more professional approach to PCB design. To help in this regard, Jaycar stocks a comprehensive range of PCB artwork materials from BISHOP GRAPHICS of the USA. This material is both dimensionally stable and accurate which, enables you to produce complex layouts with great accuracy. (Very necessary for LSI, for example). Once your artwork has been produced you can make your own board.

Why Bishop Graphics Artwork Is Superior

We have been offered many 'equivalent' PCB artwork tapes over the years at lower prices to the genuine Bishop Graphics material. Why do we stick with it? Well it's the one the professionals use and they know why. Now you can know too!

1. The artwork is very accurate. For example the DIL patterns are made to a tolerance of 0.002".
2. The line tape is precision slit from large rolls under very low stress. Precise edges.
3. The line tape is very flat black. It will not reflect light and so the line will not blur due to reflected light. Result? Absolutely sharp edges to trackwork.

4. The benefits of Crepe. The tape is 'creped'. This allows tape to be curved, a saving on corner art. Once down the curve will stay where it is. Inferior tapes try to 'creep' back to straightness. Another advantage of crepe is that you can cut through a line by mistake, realise your error and burnish the tape down again. The Bishop tape will close again. Inferior tapes can leave a hair line crack of light and an open circuit track on your PCB! Finally, to state the obvious - the tape is extremely flexible!

5. The tape is only 0.005" thick. This means that the tape will not cast a 'shadow' because of its thickness.
6. The secret adhesive. You can lay Bishop art down, peel it up again and relocate it many times. PCB artwork necessitates this and this is a valuable feature. It stays sticky!

7. Another secret. The adhesive does not 'bleed'. By this we mean that the adhesive will stay where it should be - under the art. Inferior adhesives creep away in time and the edges lose definition as a result. You can come back to Bishop Graphics artwork after a year and find no adhesive anywhere except under the art.
8. It's the most cost effective. Your labour is money. When you spend a lot of your valuable time on inferior artwork tape you - or your client - is losing money! More than the small difference between cheap artwork tape and value-for-money Bishop Graphics!



Pre-Spaced Pads

Cat. No	HG-9906
Type	0.100" pitch 2.54mm
Pads	240 \$6.50



Cat. No	HG-9907
Type	0.100" pitch 2.54mm
Pads	140 \$6.50



Cat. No	HG-9908
Type	0.156" pitch 3.96mm
Pads	150 \$6.50



DIL Patterns

Cat. No	Pins	Symbols	Price
HG-9909 14	32		\$6.50
HG-9910 16	32		\$6.50
HG-9911 18	28		\$6.50
HG-9912 24	12		\$6.50
HG-9913 28	12		\$6.50
HG-9914 40	8		\$6.50



Black Artwork Tape

Cat. No	Size	Price
HG-9930	0.026" wide	\$4.65
HG-9931	0.031" wide	\$4.90
HG-9932	0.040" wide	\$4.90
HG-9933	0.050" wide	\$4.90
HG-9934	0.062" wide	\$4.95
HG-9935	0.080" wide	\$4.95
HG-9936	0.093" wide	\$4.95
HG-9937	0.100" wide	\$4.95
HG-9938	0.125" wide	\$4.95
HG-9939	0.200" wide	\$4.95
HG-9940	0.250" wide	\$6.90

All by 20 yards



E-Z Circuit Targets

These are designed to simplify and improve photo reduction and registration (the accurate placement of symbols and circuitry) during all stages of printed circuit artwork and board production.

Cat. HG-9928	32 Symbols
Price	\$6.50

(Illustration shown actual size)



Transistor Patterns

TO-5 (36 pads)	Cat. HG-9922
Price	\$6.50

TO-18 (36 pads)	Cat. HG-9924
Price	\$6.50



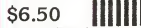
DIL Patterns Narrow Cut

Cat. No	Pins	Symbols	Price
HG-9918 14	32		\$6.50
HG-9919 16	32		\$6.50
HG-9920 40	8		\$6.50



Edge Connector Patterns

0.1" pitch (25 struts)	Cat. HG-9950
Price	\$6.50



0.156" pitch (5 struts)	Cat. HG-9952
Price	\$6.50



Donut Pads

Cat. No	Type	OD	ID	Sym
HG-9941	0.080" OD	x 0.031"	ID96	
HG-9942	0.100" OD	x 0.031"	ID96	
HG-9944	0.125" OD	x 0.031"	ID96	
HG-9945	0.156" OD	x 0.031"	ID96	
HG-9947	0.200" OD	x 0.031"	ID108	
HG-9948	0.250" OD	x 0.031"	ID128	

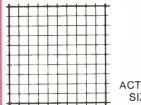
All at \$4.95 each



Artwork Films Polyester

Always use a background grid during printed circuit artwork and layout preparation to ensure maximum accuracy on the final PCB. 10 x 10 grid, matte one side - 0.003" thick. This is the material you lay your patterns on.

8.5 x 11" PACK OF 2	\$4.95
11 x 17" PACK OF 2	\$8.95

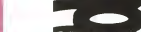


ACTUAL SIZE

Pressure Sensitive Copper Tapes

Ideal for repairing damaged or broken conductor traces on a PCB. Use to modify circuitry on existing PCB's.

Cat. HG-9901	0.031" wide \$4.95
Cat. HG-9902	0.050" wide \$4.95
Cat. HG-9903	0.100" wide \$6.25



Artwork Acc's

X-ACTO KNIFE	\$5.70
Cat. HG-9955	



X-ACTO BLADES	
Trim pack of 5	Cat. HG-9956
Price	\$3.95



X-ACTO BLADES	
Art pack of 5	Cat. HG-9957
Price	\$3.95



"Riston"

This is basically blank printed circuit, with a photo resist is a chemical that changes composition when exposed to light. Once you take the 'RISTON' and PCB out of its lightweight black plastic envelope you have a reasonable amount of time to lay your PCB pattern on the board. Where the PCB pattern falls, the chemical resist will be in shadow or 'masked' by the PCB pattern.

You can expose the PCB pattern and board in broad daylight, however a controlled source of ultraviolet light is recommended. After a suitable time you remove the PCB pattern. Where the 'RISTON' coated PCB was in shadow the photo resist will not have changed chemical composition. Where it has been exposed, it will. You then apply a developer to finish the photo resist into the etching.

After this you simply dip the PCB into the etching



Riston PCB

Single side 127 x 152mm	Cat. HG-9970	\$7.50
Single side 152 x 254mm	Cat. HG-9972	\$13.95
Single side 254 x 254mm	Cat. HG-9974	\$26.50

CCRD30 Developer

500ml Cat. HG-9964	\$4.75
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Stripper CRS-40

Stripper required to clean board before soldering.	500ml bottle Cat. HG-9968
Price	\$4.70

DaloPen

This special fibre tip marker is great for one-off PCB production. Etch resistant ink. Includes spare tip. Cat. TM-3000 \$4.75

Scotchcal 8007 Film

USED WITH BOTH RISTON AND SCOTCHCAL

This is known as exposure film and is orange in colour. Size 10" x 12". Use this film to produce either negative or positive from your original artwork. If you have positive artwork this film will reproduce it as a negative and conversely your artwork is negative this film will reproduce it as a positive. The film is then used with either Riston or Scotchcal to produce your final board.

Cat. HG-9962 10" x 12"
\$7.95

SCOTCHCAL 3M

We also stock PCB and panel production materials made by the US 3M company. PCB PRODUCTION Liquid photo resist in both positive and negative active configurations are stocked. The liquid is applied to blank, clean PCB with a cotton wool swab. The board is allowed to dry (in a dark location). The board and artwork (film) is then exposed in the same manner as Riston. (Note that the negative resist i.e. CNR05 will resist where it is EXPOSED). You then use the appropriate developer and etch in the usual manner. If you have positive artwork and want negative (or visa versa) use 8007 reversing film. If you make a lot of PCB's the 3M system is cheaper than Riston in the long run.

Positive Photo Resist CPR05

This photo sensitive product is used in the production of PCB's.

Cat. HG-9980 50ml
\$10.95

Negative Photo Resist CNR05

This product is similar to the CPR05 product. The difference being that this is a negative working compound

Cat. HG-9983 50ml
\$6.10

Developer CPD07 for Positive

This solution is used in conjunction with CPR05 for developing the PCB pattern.

Cat. HG-9981 70 grams
\$3.95

Developer CND5 for Negative

This solution again is similar to the CPD07, the exception being that this one is used in conjunction with the negative photo resist.

Cat. HG-9984 500ml
\$9.50

Stripper CRS-40

Strip your boards clean before soldering.

Cat. HG-9968 500ml
\$4.70

Panel Scotchcal

This is the 3M name for their system of producing professional grade panels from artwork but without professional facilities. You can make your finished project look great with a Scotchcal front panel.

Like Riston, Scotchcal has the photo resist already on it. You expose the Scotchcal in the usual way. Develop with 8500 solution and remove exposed material with CRS-40 stripper (equivalent to an etchant). It is really that simple!

Aluminium Scotchcal

This Scotchcal product is available in both red and black.

This means when the material has been developed the front panel will be either red or black on silver. You will end up with professional front panels. We recommend you spray the finished panel with clear lacquer (Cat. NA-1002) to maintain the clean fresh look.

SHEET SIZE 10" x 12"
Cat. HG-9988 BLACK EMULSION
Cat. HG-9989 RED EMULSION
\$9.95 ea

Plastic Scotchcal

This is similar to the HG-9988/9989 except that the background finish is white plastic, not silver. Three different colours are available, all with WHITE background.

SHEET SIZE 10" x 12"
Cat. HG-9990 RED on WHITE
Cat. HG-9991 BLACK on WHITE
Cat. HG-9992 BLUE on WHITE
\$9.95 ea

8500 Developer

This is a clear liquid which enables the user of Scotchcal aluminium or plastic materials to develop the exposed material. Cat. HG-9966
100ml bottle **\$4.35**

Stripper CRS-40

Cat. HG-9968 500ml

\$4.70

SPECIAL NOTE:

DO NOT MIX 3M DEVELOPER WITH RISTON DEVELOPER

Positive Photo Resist Spray

This aerosol is a fast drying positive photo resist for one to one reproduction of circuit, diagrams and images on metals from transparent positive masters. (Film)

- ADVANTAGES**
- Up to 50% cost saving achieved compared with using pre-coated boards
 - Outstanding resolution - better than 0.1mm
 - Ability to achieve extremely thin edge to edge uniform coating thickness
 - Easy to apply, quick drying, safe and simple to process
 - Covers approximately 2.2 sq/wm

Cat. HG-9976
\$8.95

Developer

Use this to achieve best results with the above photo resist aerosol spray.

Cat. HG-9978 **\$10.95**

Chemistry

Ferric Chloride

Now available in two sizes, both in easy storage, easy to use, childsafe plastic bottles. Directions for use supplied on the bottle.

200 gram - makes 1 litre
Cat. NC-4251 \$4.95
400 gram - makes 2 litres
Cat. NC-4252 \$7.95

Ammonium Persulfate

The alternative to Ferric Chloride. Mix contents (400 grams) with 1.5 litres of hot water to etch copper board approximately 500sq/cm.

Supplied in child safe bottle.
Cat. NC-4254
\$6.95



Magnifying Glass

Magnify the savings you make by buying at Jaycar! Also good for checking small components as well. Every toolbox should have one. Lens 35mm dia., handle 40mm long.
Cat. QM-3500
(Does not magnify our prices either!)

99c



Magnifying Glass

A must for the hobbyist. This huge 4.5" diameter viewer allows hands free operation. It will fold into a neat and easy to store package.

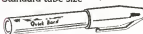
Cat. QM-3505 **\$14.50**



Super Glue

Sticks in seconds, no clamping required, no mixing, no mess. Thousands of uses.

Cat. NA-1500 **\$3.35**



PVC Insulation Tape

Top quality PVC tape. Thousands of uses. 19mm wide.

CLOURS: RED, BLACK,

5 metre roll **40c**

20 metre roll - black
10mm wide

Cat. NM-2805 **60c**

20 metre roll red
19mm wide
Cat. NM-2802 **\$1.00**

20 metre roll - black
19mm wide
Cat. NM-2803 **\$1.00**



Service Aids

We at Jaycar are concerned about our environment, and sure you are too. We have changed our range of spray cans to exclude CFC-based propellants, which are alleged to damage the Ozone layer in the atmosphere. But important to us was that quality should not be compromised. The non-CFC product is at least as good and - IN FACT - we have managed to reduce some prices!!

Freezing Spray

NEW FOR \$9

Non CFC Ozone safe propellant. Instantly freezing spray for rapidly cooling components to detect intermittent thermal faults, dry joints and overheating problems. Do not use on arcing equipment. Cat. NA-1000

\$6.95



Potentiometer Lubricant

A specially formulated lubricant designed for slider pots. Can be used safely with metal to metal, metal to plastic, and plastic to plastic parts. The anti-friction properties will ensure the controls will not stick. Ideal for lubrication of parts under pressure. Cat. NA-1012

\$7.95



Conductive Varnish

This handy 200 gram spray enables you to do all manner of things. You can spray sheets of Styrene foam and make them suitable for storing your MOS ICs. Far cheaper than other methods! You can make conductive screens inside plasticboxes to shield RF. You can re-coat the back of CRTs. You can make conductive parts of equipment cabinets to reduce static. The paint dries to a hard varnish like film. Non-inflammable and non toxic. Grab a can now. You never know when you might need it! Cat. NA-1010

\$8.95



Circuit Board Lacquer

Non CFC Ozone safe propellant. Premium quality flexible coating to protect printed circuit boards from humidity and environmental attack. Special solder through lacquer so previously coated boards can be soldered. Cat. NA-1002

\$6.95



Electronic Circuit Board Cleaner

Non CFC Ozone safe propellant. It may not be obvious, but many circuit problems occur when flux and other contaminants (even finger prints) remain on the PCB causing 'leakage' between tracks. If you work with RF, high impedance (i.e. FET Op-Amps etc), isolator or other circuits, PCB cleanliness is a MUST. The Jaycar electronic circuit board cleaner is a spray that dissolves flux residues and grime leaving the track work and board absolutely clean. We then recommend that you 'tropicalise' the board with circuit board lacquer (see above NA-1002) Cat. NA-1008

\$6.95



Electronic Cleaning Solvent

Non CFC Ozone safe propellant. A highly efficient fast drying solvent of high purity. For use on delicate electronic, electrical & precision mechanical assemblies (i.e. tuners, switches, plugs, sockets, relays, pots, etc). Cat. NA-1004

\$6.95



Dust Remover

Non CFC. Non flammable gas which allows removal of dust from electronic, electrical and optical devices. It does not leave residues and is non toxic and non conductive. Cat. NA-1018

\$7.95



Solder Reel

200 gram reel. 1mm universal gauge. Suitable for all types of electronic soldering. Resin cored and including bit saving additive. Cat. NS-3010

\$6.95

10- \$6.50 ea



Silastic Sealant

Dow Corning 738 RTV non corrosive adhesive/sealant. Ideal for any situation where corrosion or high current is a concern. Will adhere to glass, painted surfaces, ceramics, etched Teflon, glass braid, silicon rubber and some metals and plastics. Temperature range -65°C to 232°C. Will seal, bond, insulate and waterproof. Don't pay \$12.95 Cat. NM-2020

\$9.95



De-Solder Braid

A specially treated piece of braid for removing solder from a PCB. Place the braid over the solder and apply soldering iron to efficiently remove solder. 3mm wide. Cat. NS-3020

\$2.50

5 feet long!



Dry Transfer Lettering

Quality lettering sets, available in 4 different styles. Can be used on most smooth surfaces including metal, glass, plastic, wood, cardboard and paper. Ideal for lettering on rack cabinets, control panels, etc. Simply position and rub with the cap of a ball point pen or soft pencil. Made in Holland.

STYLE 1 Black lettering 4mm high. Capital letters, lower case letters, numbers. Cat. NL-4100

STYLE 2 Black lettering 6.5mm high. Capitals, lower case, numbers. Cat. NL-4102

STYLE 3 Silver letters with black shadow 7mm high. Capital letters and numbers. Cat. NL-4104

STYLE 4 Fluorescent yellow on black background. Capital letters and numbers. Cat. NL-4106

ALL ONE PRICE \$2.39 per sheet

TYPE 1 AEbr29! TYPE 2 Ab3f

TYPE 3 AB5 TYPE 4 AB02

Heatsink Compound

Heat conducting paste facilitates heat transfer from semiconductors to heatsinks. One 7.5g tube will do up to 30 TO-3 package transistors.

7.5 gram tube Cat. NM-2010

\$3.95

22.5 gram syringe Cat. NM-2011

\$7.95

150 gram tube Cat. NM-2012

\$19.95



Solder Hobby Pack

Approximately 6 metres of 1mm resincored quality solder. Cat. NS-3013

\$1.30

El Cheapo Desoldering Braid/Earth Braid

This braid is 2mm wide and will take solder off a PCB reasonably well, although it is not loaded with flux. It won't work as well as normal desolder braid, though. Supplied in a 5 metre length for \$1.25. That's only 25¢ a metre compared with normal desolder wick at 1.50 metre. Also suitable for earth braid. Cat. NS-3025

\$1.25 5 metre length

Breadboards

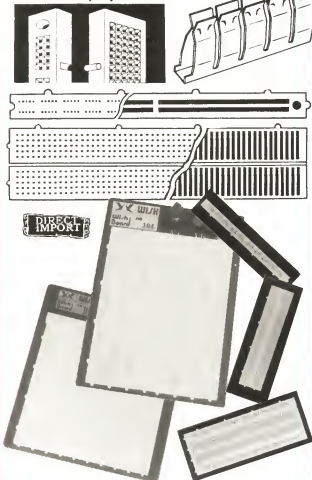
Jaycar breadboards are a convenient and economic way to build circuits and test parts without soldering. Components can be then reused many times.

Made from ABS Polymer. Internal contact terminals are made of alloy of silver and nickel and then plated. Resistance is under 1 milliohm at 1kHz. **LIFETIME GUARANTEE**

Breadboard Specifications

Cat. No	Length	Width	Weight	Tie Points	5 Con' Term	25 Con' Bus	Binding Post	IC Cap" 14"	Price
PB-8810	172	13	10	100					\$3.75
PB-8812	172	39	10	640	128	4		9	\$10.75
PB-8814	172	65	10	840	128	8		9	\$17.50
PB-8816	224	150	20	1680	256	16	3	18	\$39.95
PB-8818	240	195	2	2420	384	20	4	27	\$57.50
PB-8820	264	240	21	3200	512	28	4	36	\$69.95

* Connected ** Capacity *** Pins



Breadboard Jumper Kit

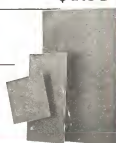
We supply a pack of 5 metres of both red and white solid core hook-up wire. It is ideal size for breadboards. All you need to do is cut it up into whatever lengths you require and strip the ends. Don't pay lots of money for pre-cut wire in a plastic box.
Cat., WH-3030

\$1.95

Doublesided Blank Fibreglass PCB

2 handy sizes

Cat. HP-9519	150 x 150mm	\$ 4.95
Cat. HP-9520	300 x 300mm	\$14.95



Universal Pre-Punched Experimenters Boards

The low cost way to build prototypes or one-off projects

We now stock 3 sizes of Phenolic board that has a matrix of punched holes on a 0.1" (2.5mm) pitch with a 'donut' of tin plated copper around each hole. Each donut is separated from its neighbours by about a 0.5mm gap. This effectively isolates each pad but also makes it easy to bridge solder across to make interconnections. Each board also has 'fingers' on opposite ends.

These can be used to connect to and from the board or to a card edge connector. Finally the non-solder side of the board has an alpha-numeric grid printed on it to assist in component identification board layout.

3 SIZES:

SMALL 95 x 72mm, 25 x 30 holes (750)

3.6mm edge pitch

Cat. HP-9550 **\$2.45**

MEDIUM 140 x 95mm, 29 x 50 holes (1450)

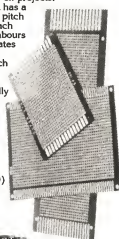
2.5mm edge pitch

Cat. HP-9552 **\$3.95**

LARGE 210 x 78mm, 24 x 67 holes (1608)

3.6mm edge pitch

Cat. HP-9554 **\$4.50**



PC Boards Vero Type Strip

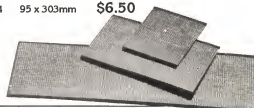
Alpha numeric grid, pre-drilled 0.9mm, 2.5mm spacing.

95mm wide x 3 handy lengths

Cat. HP-9540 95 x 76mm **\$2.25**

Cat. HP-9542 95 x 152mm **\$3.50**

Cat. HP-9544 95 x 303mm **\$6.50**



Plug-in PC Board

60 x 100 x 2.5mm spacing. Silver plated. One of the handiest boards of all - build up professional modules on this plug-in board.

Great for prototypes. 24 way edge connector.

Cat. HP-9532

\$2.45



Blank Fibreglass PCB

Single sided copper clad, for making your own PCB's.

Cat. HP-9514 150 x 75mm

\$1.95

Cat. HP-9512 150 x 150mm

\$3.75

Cat. HP-9510 300 x 300mm

\$9.95



Blank Phenolic PCB

Single sided copper clad, for making PCB boards

Cat. HP-9506 150 x 75mm **\$1.65**

Cat. HP-9507 150 x 150mm **\$2.50**



Thin Double Sided Copper Clad Blank PCB

This high grade fibreglass PCB material is about HALF as thick as normal PCB but the copper (double sided) is the same thickness as normal PCB.

6" x 6" (150 x 150mm)

Cat. HP-9523 **\$3.95**

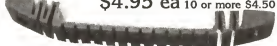
Speaker/Equipment Cabinet Fittings

Jaycar has expanded its range of hardware to include road cabinets, speaker and other equipment enclosure hardware.

Strap Handle

One piece moulded handle. Low cost and very strong. 190mm long. Cat. HS-8022

\$4.95 ea 10 or more \$4.50 each



Cabinet Handle

If you are having trouble lifting speaker cabinets, or PA bins, or any large box, try these handles. They are easy to fix. Just drill holes and screw in. Dimensions 165(W) x 210(L)mm cutout size 122mm x 164mm

Cat. HS-8010

\$9.95 ea

10 or more \$9.50 each



Plastic Locking Corner Piece

Heavy duty plastic moulded corner fitting featuring male/female inserts. These are designed to fit together so that pieces of equipment (the same size) can be stacked up and locked together. Ideal for stacking speaker boxes.

Cat. HM-3828



\$2.95 ea

10 or more \$2.75 each

Terminal Strips

12 way moulded terminal strip for mains connections etc. Made of nylon. It can easily be cut into shorter lengths.

Cat. HM-3200

\$1.60 ea 10 or more \$1.40 each



PCB Terminal Strip Bargain

These are a high quality 10 way thermoplastic PCB terminal strip. As used extensively in the alarm industry. Units are supplied unassembled - you have to screw the screws in. These normally cost \$4.95

Cat. HM-3205

\$2.95 10+ \$2.50 ea 100+ \$2.00 ea



PCB Mount Screw Terminal

Ideal for those situations where wires leave a PCB. Just solder the terminal strip to the PCB and connect wires. They interlock with each other to make longer connectors. For example if you need an 8 way, simply use 2 x 3 way and 1 x 2 way.

Cat. No	Type	1-9	10+
HM-3172	2 WAY	\$1.10	\$1.00
HM-3173	3 WAY	\$1.40	\$1.25

5mm Pin Pitch



Metal Corner Protectors

Keep the corners of your PA bins or party speakers undamaged. Just screw these on to your speakers and start throwing them around!

3 new types, all solid 1mm thick steel, bright Cadmium plated.

TYPE 1

Square corner piece, like three sides of a cube. Each side approx. 40mm square. One side has a 10mm dia. bump pressed out to act as a foot. A 4.3mm dia. hole is punched into each side for screw fixing. (Round head - not countersunk). (#8273)

Cat. HM-3840

\$2.50 10 up \$2.25 ea



TYPE 2

Similar to above but radiused (10mm radius) for rounded edge boxes, amps, speaker cabinets, etc. Ideal for carpet or vinyl covered gear. Each leg extends 40mm from corner in 3 directions. Legs punched at ends with 4.3mm hole for round head screw fixing. No bump.

(#8282)

Cat. HM-3841

\$2.50 10 up \$2.25 ea



TYPE 3

This is a 2 leg corner with the 3rd leg cut short. This is commonly used on the face of speaker cabinets etc. Radiused, with 4.3mm dia. countersunk screw fixing hole.

Cat. HM-3842

\$2.50 10 up \$2.25 ea



Plug & Socket Terminal Strip

Brand new product. It's like a standard type 12-way barrier strip or terminal strip but it has 2 strips of 12 which can be unplugged from each other. So if you have any number of semi-permanent wires from 1 to 12 that you have to unplug, this is the ideal way.

Cat. HM-3202

\$4.95



Pocket Handle

Suitable for chipboard speaker cabinets or metal enclosures.

Made in England. Panel cutout 102 x 48mm.

Cat. HS-8012

\$2.95 ea

10 or more \$2.50 each



Dial Cord 2.5 metre

Dial cord - a 2.5 metre length of top quality nylon cord to get that radio going again. Don't spend money on expensive cord that you'll never use half on! This pack has more than enough to repair any radio we've ever seen.

Cat. HP-1400

\$1.75

Tagstrips

Cat. No	Type	1-9	10+
HM-3302	2 lug	25¢	20¢
HM-3303	3 lug	32¢	27¢
HM-3304	4 lug	40¢	35¢
HM-3305	5 lug	50¢	45¢



Castors

Set of 4 castors to suit speaker boxes, TV's or anything for that matter. Castors are mounted on a 37mm square metal bracket which is simply screwed to the speaker boxes, etc by 4 self tappers. (Screws not supplied) Originally used on colour TV's.

Cat. HP-0838

SET OF FOUR

\$5



6.5mm Socket Mounting Cup

Ever tried to mount a 6.5mm socket in a wooden box?

It was impossible! Now it's easy with our unique bracket.

Cat. HS-8025

\$1.20

10 or more

\$1.00 each



3mm Nuts, Screws & Washers

Bolts are round head and the nuts steel.

Cat. No.	Size	Pkt Qty	1-9	10+
HP-0400	6mm	pk 25	\$.95	\$.85
HP-0401	6mm	pk 200	\$2.50	\$2.30
HP-0403	10mm	pk 25	\$.95	\$.85
HP-0404	10mm	pk 200	\$3.35	\$3.15
HP-0406	15mm	pk 25	\$.95	\$.85
HP-0407	15mm	pk 200	\$3.95	\$3.75
HP-0410	20mm	pk 25	\$1.20	\$1.10
HP-0411	20mm	pk 200	\$4.95	\$4.65
HP-0414	25mm	pk 25	\$1.25	\$1.10
HP-0415	25mm	pk 200	\$5.95	\$5.60
HP-0418	32mm	pk 25	\$1.50	\$1.30
HP-0419	32mm	pk 200	\$7.50	\$7.10
HP-0425	nuts	pk 25	\$1.25	\$1.10
HP-0426	nuts	pk 200	\$4.25	\$4.00
HP-0430	washers	pk 25	\$.95	\$.85
HP-0431	flat washers	pk 200	\$3.95	\$3.75
HP-0433	washer	pk 25	\$1.25	\$1.15
HP-0434	shakeproof washer	pk 200	\$4.50	\$4.20



4mm Nuts, Screws & Washers

Bolts are roundhead and the nuts steel.

Cat. No.	Size	Type	Pkt Qty	1-9	10+
HP-0450	10mm	R/H bolt	pk 25	\$1.25	\$1.10
HP-0451	10mm	R/H bolt	pk 200	\$4.35	\$4.20
HP-0453	15mm	R/H bolt	pk 25	\$1.25	\$1.10
HP-0454	15mm	R/H bolt	pk 200	\$5.50	\$5.20
HP-0462	Hex	Nuts	pk 25	\$1.25	\$1.10
HP-0463	Hex	Nuts	pk 200	\$4.95	\$4.60
HP-0465	Flat	Washer	pk 25	\$.95	\$.85
HP-0466	Flat	Washer	pk 200	\$4.50	\$4.20
HP-0468	Sprf	Washer	pk 25	\$1.25	\$1.10
HP-0469	Sprf	Washer	pk 200	\$4.95	\$4.65

Cat. No.	Length/Type	Qty	1-9	10+
HP-0500	10mm positive	10	\$1.50	\$1.30
HP-0504	12mm capscrow	10	\$3.25	\$3.00
HP-0506	12mm cheesehead screw	20	\$2.50	\$2.35



8BA Machine Screws & Nuts

Cat. No.	Length	Pkt Qty	Price
HP-0200	12mm screw	10	\$1.50
HP-0220	Brass nut	25	\$1.50



Self Tapping Screws

Nickel plated steel.

Cat. No.	Type	Qty	1-9	10+
HP-0550	No 4 x 6mm	25	\$1.00	90¢
HP-0551	No 4 x 6mm	10	\$.50	45¢
HP-0554	No 4 x 12mm	25	\$1.20	\$1.10
HP-0556	No 6 x 12mm	25	\$1.20	\$1.10
HP-0630	No 8 x 19mm (Black)	20	\$1.25	\$1.15

6BA Screws

Cat. No.	Type	Qty	1-9	10+
HP-0255	6BA x 1/2" C/Su	25	\$1.95	\$1.75
HP-0257	6BA x 3/4" Cheese	25	\$1.95	\$1.75
HP-0254	6BA x 1/2" Cheese	25	\$1.95	\$1.75
HP-0260	6BA x 1/2"	25	\$1.25	\$1.10
HP-0290	6BA flatwasher	50	\$1.25	\$1.10
HP-0295	6BA shakeproof	50	\$1.25	\$1.10

Spacers

Untapped. Clearance 4BA or 1/8" ww.

Cat. No.	Length	Qty	1-9	10+
HP-0860	6mm	8	\$ 1.20	\$1.10
HP-0870	6mm	100	\$ 1.30	\$1.20
HP-0862	9mm	8	\$ 1.30	\$1.20
HP-0864	12mm	6	\$ 1.50	\$1.40
HP-0866	25mm	4	\$ 1.40	\$1.30



Nylon PCB Spacers

Superb range of spacers. Fixing is by size 6 or 8 self tapping screws. The flat centre section can be gripped to prevent rotation while fixing.

Cat. No.	Length	Qty	Price
HP-0980	6mm	5	\$1.00
HP-0982	12mm	5	\$1.00
HP-0984	19mm	4	\$1.00
HP-0986	25mm	4	\$1.20
HP-0988	32mm	4	\$1.40
HP-0990	38mm	4	\$1.50



3mm Tapped Metal Spacers

Cat. No.	Length	Qty	1-9	10+
HP-0900	10mm	8	\$ 1.65	\$ 1.50
HP-0901	10mm	100	\$10.50	\$10.00
HP-0904	15mm	8	\$ 1.85	\$ 1.65
HP-0905	15mm	100	\$14.50	\$13.50
HP-0907	25mm	8	\$ 3.25	\$ 3.00
HP-0908	25mm	100	\$26.50	\$25.00



Nylon PCB Standoff

Saves using nuts, bolts and spacers.

Size 9mm (1/4")

Cat. No.	Pkt Qty	Price
HP-0770	8	\$1.25
HP-0772	100	\$9.95



Cable Clips

A must for your next cable installation.

Cat. No.	Size	Pkt	1-9	10+
HP-1170	Figure 8 cable	50	\$4.50	\$4.25
HP-1172	Telephone cable	50	\$4.25	\$4.00
HP-1174	Coaxial cable	50	\$4.50	\$4.25
HP-1176	7-9mm cable	50	\$3.20	\$3.00
HP-1178	10-12mm cable	20	\$3.20	\$3.00



2mm Screws

2mm diameter, 8mm long cheesehead screw for securing slider pots and most slider switches

Cat. HP-0390

PACK OF 4 49¢

Cable Clamps

Used for securing cable to chassis.

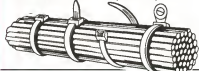
Cat. No.	Size	Pkt	1-9	10+
HP-0782	For 6mm cable	6	\$1.00	90¢
HP-0754	For 7mm cable	6	\$1.00	90¢
HP-0756	For 10mm cable	6	\$1.00	90¢



Cable Ties

Great for keeping those wiring looms together.

Cat. No.	Length	Pkt	1-9	10+
HP-1200	100mm	20	\$1.20	\$1.10
HP-1201	150mm	15	\$1.75	\$1.60
HP-1202	200mm	15	\$1.95	\$1.75



Cordgrip Clamps

PACK OF 4

Cat. HP-0716 for cables to 9mm dia. (3 wire mains)

Panel cutout 14mm
\$1.25 10+ \$1.15
for figure '8' cables
Panel cutout 11.5mm
\$1.00 10+ 90¢



Rubber Grommets

Cat. No.	Size	Pkt	1-9	10+
HP-0702	6mm hole	8	\$1.50	\$1.40
HP-0704	9mm hole	8	\$2.00	\$1.80



Grommet Bargains

3.5mm hole grommet. Panel cutout 6.5mm.

Cat. HP-0700
Packet of 20 \$1.00

10mm hole grommet. Panel cutout 17mm.

Cat. HP-0705
Packet of 10 \$1.20



Rubber Feet

Cat. No.	Type	Qty	1-9	10+
HP-0800	Screw on	8	\$1.95	\$1.75
HP-0810	12mm stick on	100	\$19.95	\$18.95
HP-0815	12mm stick on	4	\$ 1.50	\$1.35
HP-0820	20mm stick on	100	\$19.95	\$18.95
HP-0825	20mm stick on	4	\$ 1.75	\$1.60
HP-0828	25 x 17mm(H)	each	\$.65	\$.55
HP-0830	Large plastic feet	each	\$.85	\$.75



Solder Lugs

A pack of 50 assorted solder lugs for any screw down connection.

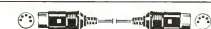
PACK OF 50 \$1.50

Cat. HP-1350



Audio Leads

5 Pin DIN Plug to
5 Pin DIN Plug



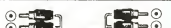
Cat. WA-1000
\$4.50

5 Pin DIN Plug to
4 RCA Plugs



Cat. WA-1002
\$6.50

4 RCA Plugs to
4 RCA Plugs



Cat. WA-1003
\$6.95

2 RCA Plugs to
2 RCA Plugs



Cat. WA-1042
\$4.95

High Quality Audio Lead - 2 RCA x 2 RCA

As technology improves the humble Hi Fi has really 'turned the corner' in recent years with the advent of compact disc players, Mosfet amps, etc. In keeping with these changes we have introduced a high quality audio gold connector lead, 2 RCA to 2 RCA, so that all that technology is not lost by using inferior grade connecting cables. The lead is 1 metre long which is long enough to go between most audio/video decks.

Cat. WA-1045
\$16.95



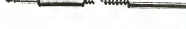
RCA Plug to
RCA Plug

Cat. WA-1016
\$2.95



6.5mm Stereo Plug
to 6.5mm Stereo
Socket Curly Cord

Cat. WA-1005
\$9.95



2 RCA Plugs to
Bare Ends

These are a stereo lead, (figure 8 shielded) with two RCA plugs on one end and tinned stripped leads on the other. Length 1.8 metres. (Lead with 2 RCA plugs on both ends sell for \$4.95)

Limited Quantity.

Cat. WA-1040
\$1.95

10+ \$1.75 ea



Curly Cord
1.8 metres 3 conductor
curly cord for micro-
phone replacements etc.

Cat. WA-1090
\$5.50



Video Leads & Adaptors

DIRECT IMPORT

Coax TV Plug to RCA Socket Adaptor

Cat. PA-3675

\$2.50 ea

10+ \$2.25 ea



Coax TV Socket to RCA Socket Adaptor

Cat. PA-3676

\$2.50 ea

10+ \$2.25 ea



BNC - BNC

1.5 metres

Cat. AV-6510

\$8.50 ea

3 metres length

Cat. AV-6511

\$11.50 ea



BNC - PL259

1.5 metres

Cat. AV-6512

\$8.95 ea



PL259 - PL259

1.5 metre

Cat. AV-6514

\$7.95 ea



RCA - PL259

1.5 metre

Cat. AV-6516

\$5.95



BNC - RCA

1.5 metre

Cat. AV-6521

\$4.95



RCA - RCA

1.5 metre

Cat. AV-6518

\$4.95

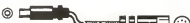


Stereo Adaptor Lead Kit

Enables you to patch virtually any VCR to another. Contains plug adaptors, leads, etc.

Cat. AV-6538

\$25.95



DIN

8 Pin DIN Micro Plug
Suit Macintosh
computers
Cat. PP-0370
\$2.95
10+ \$2.75 ea



2 Pin DIN Plug
Cat. PP-0300
75¢
10+ 70¢ ea



3 Pin Line Plug
Cat. PP-0302
\$1.20
10+ \$1.10



5 Pin Line Plug
Cat. PP-0304
\$1.20
10+ \$1.10 ea



5 Pin Line Plug 270°
Cat. PP-0305
\$1.65
10+ \$1.50



6 Pin Line Plug
Cat. PP-0308
\$1.65
10+ \$1.50 ea



7 Pin Line Plug
Cat. PP-0310
\$1.65
10+ \$1.50 ea



8 Pin Line Plug
Cat. PP-0312
\$1.95
10+ \$1.80 ea



2 Pin Panel Socket
Cat. PS-0340
45¢
10+ 40¢ ea



2 Pin Line Socket
Cat. PS-0342
55¢
10+ 50¢ ea



3 Pin Chassis Socket
Cat. PS-0346
\$1.40
10+ \$1.30 ea



5 Pin Panel Socket
Cat. PS-0348
\$1.40
10+ \$1.30 ea



5 Pin Right Angle
PCB Mount Socket
Cat. PS-0350
\$1.95
10+ \$1.75 ea



5 Pin Line Socket
Cat. PS-0352
\$1.65
10+ \$1.50 ea



6 Pin Panel Socket
Cat. PS-0354
\$1.65
10+ \$1.50 ea



6 Pin Line Socket
Cat. PS-0355
\$1.85
10+ \$1.70 ea



7 Pin Chassis Socket
Cat. PS-0357
\$1.85
10+ \$1.70 ea



7 Pin Line Socket
Cat. PS-0356
\$1.85
10+ \$1.70 ea



8 Pin Line Socket
Cat. PS-0358
\$1.95
10+ \$1.80 ea



8 Pin Chassis Socket
Cat. PS-0359
\$2.20
10+ \$2.00 ea



Banana

4mm Plugs
Cat. PP-0400
Cat. PP-0402
65¢
10+ 60¢ ea

Red
Black



4 Panel Mount Sockets
Cat. PS-0406
Cat. PS-0408
65¢
10+ 60¢ ea

Red
Black



2mm Plug for
Multimeters
Cat. PP-0412
Cat. PP-0414
90¢
10+ 85¢ ea

Red
Black



2mm Test Probe for
Multimeters
Cat. PP-0422
Cat. PP-0424
\$1.25
10+ \$1.10 ea

Red
Black



4mm Metal Binding
Post - Incorporates a
banana socket. All
metal for easy
grounding.
Cat. PT-0440
\$1.20
10+ \$1.10 ea



Deluxe Binding Posts
Incorporates a banana
socket. Available in a
range of colours.

Cat. PT-0450
Cat. PT-0451
Cat. PT-0452
Cat. PT-0453
Cat. PT-0454
Cat. PT-0455
\$1.40
10+ \$1.25 ea

Blue
Yellow
White
Red
Black
Green



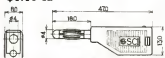
Quality
Banana Plugs -
Piggy Back Style.
A multimeter probe
can be inserted into
the back of the plug.
Now available in 5
colours to match our
binding posts.

Cat. PT-0390
Cat. PT-0391
Cat. PT-0381
Cat. PT-0382
Cat. PT-0383

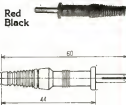
Red
Black
Green
Blue
Yellow



\$1.25
10+ \$1.10 ea



Quality Flexible
Banana Plugs
Cat. PP-0394
Cat. PP-0395
95¢
10+ 85¢ ea



TV Coax

75 Ohm Plastic Line
Plug
Cat. PP-0600
\$1.20
10+ \$1.00 ea



75 Ohm Metal Line
Plug
Cat. PP-0602
\$2.20
10+ \$2.00 ea



75 Ohm Plastic Line
Socket
Cat. PS-0610
\$1.20
10+ \$1.00 ea



75 Ohm Metal Line
Socket
Cat. PS-0614
\$2.20
10+ \$2.00 ea



75 Ohm Plastic
Chassis Socket
Cat. PS-0616
\$1.10
10+ \$1.00 ea



75 Ohm Quality
Metal Chassis Mount
Cat. PS-0628
\$2.25
10+ \$2.00 ea



Joiner Female to
Female
Cat. PS-0620
\$1.75
10+ \$1.60



Joiner Male to Male
Cat. PS-0622
\$1.75
10+ \$1.60 ea



Coax Cable Joiner.
Hardwired for 75 &
50 ohm coax.
Cat. PS-0618
\$1.50
10+ \$1.30 ea



F Connectors

Coax Plug
Cat. PP-0640
\$1.20
10+ \$1.08 ea



Coax Socket
Cat. PS-0642
\$1.40
10+ \$1.20 ea



300 Ohm TV

Plug
Cat. PP-0630
\$1.85
10+ \$1.75 ea



BNC

Male Line Plug
Cat. PP-0650
\$2.80
10+ \$2.50 ea



Male Line Plug -
Solderless
Cat. PP-0652
\$3.50
10+ \$3.25 ea



Male Line Plug -
Solderless Twist On
Cat. PP-0653
\$3.50
10+ \$3.25 ea



Panel Socket Square
Mount
Cat. PS-0656
\$2.95
10+ \$2.75 ea



Panel Socket Single
Hole Mount
Cat. PS-0658
\$2.50
10+ \$2.25 ea



Gold Plated Type (as
PS-0658)
Cat. PP-0660
\$4.50
10+ \$4.00 ea



BNC Insulated Washers.
Packet of 4 insulating washers for PS-0658.
(Not illustrated)
Cat. HP-1220
\$2.00 per pkt 10+ \$1.80 pkt

BNC T Adaptor
1 Female to 2
Female
Cat. PA-3660
\$7.95
10+ \$7.50 ea



BNC T Adaptor
1 Male to 2 Female
Cat. PA-3662
\$7.95
10+ \$7.50 ea



Double Female
Panel Mount
Cat. PS-0662
\$4.50
10+ \$4.20 ea



BNC Male to Double
Binding Posts/
Banana Sockets
Cat. PA-3666
\$9.95
10+ \$9.50 ea



BNC Female to
Double Banana
Plugs
Cat. PA-3668
\$8.50
10+ \$8.00 ea



UHF

PL259 Plug.
For RG58 coax cable
with reducer
Cat. PP-0680
\$2.95
10+ \$2.75 ea



PL259 Plug.
For RG8U (no
reducer)
Cat. PP-0682
\$2.95
10+ \$2.75 ea



Reducing Adaptor
for PP-0682
Cat. PP-0684
70¢
10+ 60¢ ea



PL259 Solderless
Plug
Cat. PP-0683
\$3.50
10+ \$3.00 ea



SO238 Panel Socket
Square Mount
Cat. PS-0686
\$2.25
10+ \$2.10 ea



Round, Single Hole
Mount
Cat. PS-0688
\$2.25
10+ \$2.10 ea



Double Female
Joiner
Cat. PS-0690
\$2.50
10+ \$2.30 ea



Twinax

Twin Coax Male
Plug.
(As used on IBM &
other computers)
Cat. PP-0670
\$9.95
10+ \$8.95 ea



Twin Coax Chassis
Socket
(As used on IBM &
other computers)
Cat. PS-0672
\$11.95
10+ \$10.95 ea



OPEN AN ACCOUNT WITH JAYCAR

Jaycar is now
accepting account
applications from
all established
companies who
can exhibit good
trade references.
For application
details see our
store managers or
phone
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Don't forget to
call in early in the
month to buy
your new copy of
Silicon Chip and
Electronics
Australia. We
generally have
them
available before
they arrive in
newsagents.

D Subminiature Connectors

9 Pin Male Solder Plug
Cat. PP-0800

\$2.25

10+ \$2.00 ea



DIRECT IMPORT

15 Pin Male Solder Plug
Cat. PP-0820

\$2.50

10+ \$2.25 ea



25 Pin Male Solder Plug
Cat. PP-0840

\$1.95

10+ \$1.75 ea



37 Pin Male Solder Plug
Cat. PP-0860

\$7.95

10+ \$7.25 ea



9 Pin Female Solder Socket
Cat. PS-0804

\$2.75

10+ \$2.50 ea



15 Pin Female Solder Socket
Cat. PS-0824

\$2.75

10+ \$2.50 ea



25 Pin Female Solder Socket
Cat. PS-0844

\$1.95

10+ \$1.75 ea



37 Pin Female Solder Socket
Cat. PS-0864

\$10.95

10+ \$9.95 ea



9 Pin 90° Male Right Angle PCB Mount with Solder Terminals (Not illustrated)
Cat. PP-0810

\$3.45

10+ \$2.95 ea

15 Pin 90° Male Right Angle PCB Mount Solder Terminals
Cat. PP-0822

\$4.25

10+ \$3.95 ea



25 Pin 90° Male Right Angle PCB Mount Solder Terminals
Cat. PS-0841

\$4.50

10+ \$4.25 ea



9 Pin 90° Female Right Angle PCB Mount Solder Terminals (Not illustrated)
Cat. PS-0812

\$3.95

10+ \$3.25 ea

15 Pin 90° Female Right Angle PCB Mount Solder Terminals (Not illustrated)
Cat. PS-0826

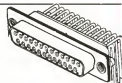
\$3.50

10+ \$3.25 ea

25 Pin 90° Female Right Angle PCB Mount Solder Terminals (Not illustrated)
Cat. PS-0845

\$6.95

10+ \$6.50 ea



37 Pin 90° Female Right Angle PCB Mount Solder Terminals (Not illustrated)
Cat. PS-0866

\$11.95

10+ \$10.95 ea

9 Pin IDC Plug
Cat. PP-0802

\$7.50

10+ \$7.25 ea



15 Pin IDC Plug (Not illustrated)
Cat. PP-0821

\$7.50

10+ \$7.25 ea

25 Pin IDC Plug
Cat. PP-0842

\$7.50

10+ \$7.25 ea



9 Pin IDC Socket
Cat. PS-0805

\$7.50

10+ \$7.25 ea



15 Pin IDC Socket (Not illustrated)
Cat. PS-0825

\$7.50

10+ \$7.25 ea

25 Pin IDC Socket
Cat. PS-0846

\$7.50

10+ \$7.25 ea



9 Pin Backshell (Not illustrated)
Cat. PM-0808

\$1.90

10+ \$1.80 ea

15 Pin Backshell
Cat. PM-0828

\$2.00

10+ \$1.80 ea



25 Pin Backshell
Cat. PM-0848

\$2.00

10+ \$1.80 ea



25 Pin High Quality Backshell with Finger Grip Screws
Cat. PM-0850

\$3.50

10+ \$3.25 ea



37 Pin Backshell (Not illustrated)
Cat. PM-0868

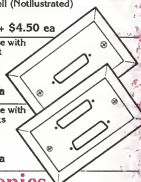
\$4.95

10+ \$4.50 ea

White Wall Plate with one D25 cutout
Cat. PM-0857

\$1.89

10+ \$1.79 ea



White Wall Plate with two D25 cutouts
Cat. PM-0858

\$2.29

10+ \$2.19 ea

Centronics

Solder Line Plug
Cat. PP-0890

\$7.50

10+ \$7.00 ea



IDC Line Plug
Cat. PP-0892

\$8.50

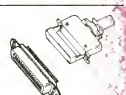
10+ \$8.00 ea



Panel Line Solder Socket
Cat. PS-0895

\$9.95

10+ \$9.50 ea



IDC Line Socket
Cat. PS-0896

\$9.95

10+ \$9.50 ea



Plugs & Sockets

IDC Connectors

16 Way IDC Header
with Relief Strain
Cat. PP-0945

\$4.25

10+ \$3.85 ea



26 Way IDC Header with Strain Relief
Cat. PP-0947

\$5.50 10+ \$5.00 ea

34 Way IDC Header with Strain Relief
Cat. PP-0948

\$5.50 10+ \$5.00 ea

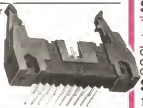
50 Way IDC Header with Strain Relief
Cat. PP-0950

\$6.95 10+ \$6.50 ea

16 Way IDC Header
Right Angle with
Strain Relief
Cat. PP-0965

\$4.25

10+ \$3.85 ea



26 Way IDC Header Right Angle with Strain Relief
Cat. PP-0967

\$4.95 10+ \$4.50 ea

34 Way IDC Header Right Angle with Strain Relief
Cat. PP-0968

\$6.25 10+ \$6.00 ea

50 Way IDC Header Right Angle with Strain Relief
Cat. PP-0970

\$10.95 10+ \$10.50 ea

14 Way IDC Line
Socket
Cat. PS-0983

\$2.00



16 Way IDC Line Socket
Cat. PS-0985

\$4.75 10+ \$4.55 ea

20 Way IDC Line Socket
Cat. PS-0986

\$5.25 10+ \$5.00 ea

26 Way IDC Line Socket
Cat. PS-0987

\$5.25 10+ \$5.00 ea

34 Way IDC Line Socket
Cat. PS-0988

\$5.75 10+ \$5.50 ea

50 Way IDC Line Socket
Cat. PS-0990

\$7.50 10+ \$7.00 ea



16 Way Economy
IDC Right Angle
Connector
Cat. PP-0992

\$3.50

10+ \$3.25 ea



26 Way Economy IDC Right Angle Connector
Cat. PP-0993

\$3.25 10+ \$3.10 ea

34 Way Economy IDC Right Angle Connector
Cat. PP-0994

\$5.50 10+ \$5.20 ea

50 Way Economy IDC Right Angle Connector
Cat. PP-0996

\$7.95 10+ \$7.50 ea

Edge Connector

Commodore Edge
Connector
Cat. PA-0888

\$6.95

10+ \$6.50 ea



Computer Leads

25 Way D Male to
Male - 1.8 metres
Cat. PL-0855

\$19.95



25 Way D Female to
Male - 1.8 metres
Cat. PL-0856

\$19.95



25 Way D Male to
Centronics Plug - 1.8
metres
Cat. PL-0854

\$18.95

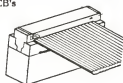


IDC Edge Connector

34 Way for
Connecting to PCB's
and Disk Drives
Cat. PL-6560

\$9.50

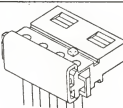
10+ \$8.50 ea



4 Pin Disk Drive
Plug
Cat. PP-0920

\$2.75

10+ \$2.50 ea



Cannon

XLP/AXR Type 3 pin
Line Male
Cat. PP-1024

\$5.25

10+ \$5.00 ea



3 Pin Line Female
Cat. PS-1032

\$5.50

10+ \$5.20 ea



3 Pin Chassis Male
(Plug)
Cat. PP-1020

\$4.25

10+ \$4.00 ea



3 Pin Chassis
Female (Socket)
Cat. PS-1030

\$5.95

10+ \$5.75 ea



3 Pin Plastic Chassis
Male
Cat. PP-1016

\$3.95

10+ \$3.70 ea



3 Pin Plastic Chassis
Female
Cat. PS-1018

\$3.95

10+ \$3.70 ea



5 Pin Line Male
Cat. PP-1052

\$8.95

10+ \$8.25 ea



5 Pin Line Female
Cat. PS-1058

\$13.95

10+ \$13.00 ea



5 Pin Chassis Male
(Plug)
Cat. PP-1050

\$7.95

10+ \$7.50 ea



5 Pin Chassis
Female (Socket)
Cat. PS-1056
\$13.95

10+ \$13.00 ea



240V (5A) Chassis
Male Type AXL-LNE
32. Recessed pins
inside tube.
Cat. PS-1000
\$8.95

10+ \$8.50 ea



240V (5A) Female Type AXL-LNE 11C.
Recessed pins in hole to suit above product.
Cat. PS-1002
\$10.95 10+ \$10.00 ea

DC Power

2.1mm Line Plug
Cat. PP-0510

80¢

10+ 70¢ ea



2.5mm Line Plug
Cat. PP-0512

80¢

10+ 70¢ ea



2.1mm Chassis
Socket
Cat. PS-0516

\$1.00

10+ 90¢ ea



2.5mm Chassis
Socket
Cat. PS-0518

\$1.00

10+ 90¢ ea



2.1mm Bulkhead
Socket
Cat. PS-0522

\$2.25

10+ \$2.00 ea



2.5mm Bulkhead
Socket
Cat. PS-0524

\$2.25

10+ \$2.00 ea



Cigarette Lighter
Plug.
Simply plugs into the
car cigar/cigarette
lighter socket to
obtain 12V DC from
the car battery.
Cat. PP-2000
\$1.20

10+ \$1.10 ea



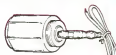
Cigarette Lighter
Plug - Fused.
As PP-2000 but with
the added safety
benefit of being
fused.
Cat. PP-2001
\$2.95

10+ \$2.70 ea



Cigarette Lighter
Chassis Socket
Cat. PS-2002
\$4.95

10+ \$4.65 ea



Cigarette Lighter
Inline Socket
Cat. PS-2003
\$2.20

10+ \$2.00 ea



Telephone

Telecom Type Plug
Cat. PP-1400

\$3.95

10+ \$3.50 ea



Telecom Type
Socket
Cat. PS-1410

\$4.50

10+ \$4.25 ea



SCART

21 Pin Plug
Cat. PP-0910

\$4.75



Multi Pin Plugs

2 Pin Utilux Moulded
Nylon Line Plug and
Socket Assembly.
Included in the
assembly along with
pins of both sex.
Cat. PP-2020
\$1.95

10+ \$1.85 ea



3 Pin Utilux plug/socket Assembly
Cat. PP-2022

\$2.50 10+ \$2.30 ea

6 Pin Utilux plug/socket Assembly
Cat. PP-2024

\$3.20 10+ \$3.00 ea

12 Pin Utilux plug/socket Assembly
Cat. PP-2026

\$4.50 10+ \$4.25 ea

Car Radio Antenna
Plug
Cat. PP-2040

\$1.25

10+ \$1.10 ea



Car Radio Socket
Chassis Mount
Cat. PS-2042

\$1.25

10+ \$1.10 ea



3Pin Plug & Chassis
Socket. Suited for
low voltage and
speakers.
Cat. PS-2092
\$1.50

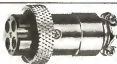
10+ \$1.35 ea



Microphone Line
Socket - 4 Pin
Cat. PS-2012

\$3.95

10+ \$3.50 ea



Microphone Panel
Plug - 4 Pin
Cat. PP-2010

\$3.50

10+ \$3.25 ea



Octopus 8 Pin Plug
Cat. PP-2080

\$3.95

10+ \$3.70 ea



Octopus Chassis
Socket
Cat. PS-2082

\$3.95

10+ \$3.70 ea



Speaker Terminals

2 Way Push
Connection
Cat. PT-3000
\$1.60

10+ \$1.50 ea



4 Way Push
Connection
Cat. PT-3002
\$2.60

10+ \$2.40 ea



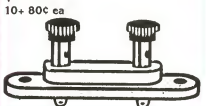
Large Round
Speaker Terminal
Cat. PT-3004
\$2.50

10+ \$2.25 ea



2 Way Screw Down
Speaker Terminals
Cat. PT-3008
\$1.00

10+ 80¢ ea



PCB Mount Safety Speaker Connectors.
The bare wires simply insert and the plastic shroud twisted.
Cat. PT-3010
\$3.95
10+ \$3.65 ea



Screw Terminals on Phenolic - 2 Way
Cat. PT-3040
40¢
10+ 35¢ ea



4 Way
Cat. PT-3042
65¢
10+ 55¢ ea



Mains Connectors

240V Line Plug
Cat. PT-4000
\$1.95
10+ \$1.75 ea



240V Piggyback Plug
Cat. PT-4002
\$3.95
10+ \$3.65 ea



IEC320 Chassis 240V Plug
Cat. PP-4005
\$2.95
10+ \$2.45 ea



IEC Male Chassis Socket with Fuse
Cat. PP-4004
\$6.50
10+ \$6.25 ea



IEC320 240V Female Line Socket
Cat. PS-4006
\$3.75
10+ \$3.50 ea



IEC Line Plug. Widely used in personal computers
Cat. PP-4007
\$7.95



240V Mains Line Socket
Cat. PS-4008
\$4.20
10+ \$4.00 ea



240V Double Adaptor
Cat. PP-4032
\$4.20
10+ \$4.00 ea



BB Connector. Used to connect mains wiring inside junction boxes, etc.
Cat. PP-4080
25¢ 10 + 21¢ ea

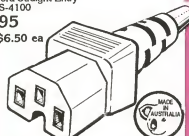
Mains Surface Mount Socket
Cat. PS-4012
\$3.95
10+ \$3.50 ea



IEC Power Leads

IEC320 style plugs, sockets, cord, etc. Jaycar stocks a range of EA approved mains line cords. We have them in straight entry, left and right entry with and without standard 240V mains moulded plug. Each cord is a generous 2 metres long and is rated at 10 amps continuous. They are only available in grey.

Line Cord Straight Entry
Cat. PS-4100
\$6.95
10+ \$6.50 ea



Line Cord Right Hand Entry
Cat. PS-4102
\$6.95 10+ \$6.50 ea

Line Cord Left Hand Entry
Cat. PS-4104
\$6.95 10+ \$6.50 ea

Line Cord Straight Entry with 240V Plug
Cat. PS-4106
\$8.95 10+ \$8.50 ea

Power Leads

3 Pin 240V AC Plug with 2 metres of 3 core cable to bare ends
Cat. PS-4110
\$3.50
10+ \$3.25 ea



Cassette Power Leads. All 2 metres long

TYPE 1
Cat. PS-4115



TYPE 2
Cat. PS-4116



TYPE 3
Cat. PS-4117



TYPE 4
Cat. PS-4118



ALL \$5.95 each

Travel Adaptors

Australian to Overseas Pack
A must if you are travelling overseas. A pack of 3 adaptor plugs which will enable you to use an Australian appliance anywhere in the world.

The British Plug
3 square pins for Great Britain, Ireland, Singapore, parts of the Middle East, Hong Kong and Asia.



The European Plug
2 round pins for Europe, Noumea, Tahiti, parts of the Middle East, Asia and South America



The USA Plug
2 flat pins and round earth for North America and Canada.



PACK OF 3
Cat. PP-4022
\$19.95

Note: These adaptors will not change the voltage. You will need to switch the voltage on your appliance.



Australian Adaptor
For use in Australia by visitors from Europe, USA and Japan. Note: Will not change voltage.
Cat. PP-4020
\$7.95



Quick Connect

Female Spade Lug
Cat. PT-4507
\$1.50 pkt 8



Male Spade Lug
Cat. PT-4509
\$1.50 pkt 8



Spade Lug Adaptor
Cat. PT-4512
\$1.50 pkt 6



Eye Terminal
Cat. PT-4514
\$1.50 pkt 8



Mini Female Spade L.
Cat. PT-4520
\$1.95 pkt 1!



Forked Spade
Cat. PT-4523
\$1.50 pkt 8



Large Forked Spade
Cat. PT-4524
\$1.50 pkt 8



Bullet Connector
Male Insulated
Cat. PT-4500

\$2.50 pkt 10



Bullet Connector
Female Insulated
Cat. PT-4502

\$2.50 pkt 10



Unbelievable Solderless Lug Pack

Another surplus buy. A bag of approximately 200 assorted insulated solderless terminals. Included are ring terminals in many different sizes, lug terminals, cable joiners, and solderless lugs to connect into terminal block. These normally cost between 15 and 30¢ each. We estimate the normal price for these parts would be around \$50. Limited quantity. Cat. HP-1210

ONLY \$10

That's only 5¢ each!



Machine Pin IC Socket Strips

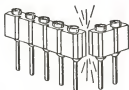
What a great idea. If you are a serviceman or hobbyist you don't have to keep every size of IC socket handy. Just keep a few of these and snap them off to make any length.

- Quality machine pins
- 32 pins per length

Cat. PI-6470

\$3.50 per length

10+ \$3.25



1/2 Price Molex Pins

These have been selling for \$4.50 for 100. We now have available a new style and can offer them at 1/2 the previous price. Cat. PI-6541

\$2.25 pkt of

100



IC Sockets

West German Production IC Sockets

Gold insert machined pin, anti-wicking, very high quality. Ideal for professional/portable or field service equipment.

Cat. PI-6452	8 PIN	\$1.00 ea - 10+ \$0.90 ea
Cat. PI-6454	14 PIN	\$1.35 ea - 10+ \$1.25 ea
Cat. PI-6456	16 PIN	\$1.50 ea - 10+ \$1.35 ea
Cat. PI-6458	18 PIN	\$1.65 ea - 10+ \$1.50 ea
Cat. PI-6460	20 PIN	\$1.90 ea - 10+ \$1.80 ea
Cat. PI-6462	22 PIN	\$2.00 ea - 10+ \$1.85 ea
Cat. PI-6464	24 PIN	\$2.30 ea - 10+ \$2.10 ea
Cat. PI-6466	28 PIN	\$2.60 ea - 10+ \$2.40 ea
Cat. PI-6468	40 PIN	\$3.25 ea - 10+ \$3.00 ea

ALL GOLD INSERT MACHINED PIN



Production (Low Cost) IC Sockets PCB Mount Solder Tail

Cat. PI-6500	8 PIN	20¢ ea - 10+ 18¢ ea
Cat. PI-6501	14 PIN	25¢ ea - 10+ 22¢ ea
Cat. PI-6502	16 PIN	28¢ ea - 10+ 25¢ ea
Cat. PI-6503	18 PIN	32¢ ea - 10+ 28¢ ea
Cat. PI-6504	20 PIN	48¢ ea - 10+ 44¢ ea
Cat. PI-6505	22 PIN	50¢ ea - 10+ 45¢ ea
Cat. PI-6506	24 PIN	50¢ ea - 10+ 45¢ ea
Cat. PI-6507	28 PIN	70¢ ea - 10+ 65¢ ea
Cat. PI-6508	40 PIN	70¢ ea - 10+ 65¢ ea

All tin plated Phosphor Bronze or Beryllium Copper.



Wire Wrap Machined IC Sockets

These high quality wire wrap sockets have machined pins. Now wire wrap users can have the BEST sockets at a reasonable price.

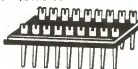
Cat. PI-6491	8 PIN	\$1.75 ea - 10+ \$1.65 ea
Cat. PI-6492	14 PIN	\$2.95 ea - 10+ \$2.75 ea
Cat. PI-6493	16 PIN	\$3.50 ea - 10+ \$3.25 ea
Cat. PI-6494	18 PIN	\$3.65 ea - 10+ \$3.40 ea
Cat. PI-6495	20 PIN	\$3.80 ea - 10+ \$3.50 ea
Cat. PI-6496	22 PIN	\$4.15 ea - 10+ \$3.80 ea
Cat. PI-6497	24 PIN	\$4.40 ea - 10+ \$4.15 ea
Cat. PI-6498	28 PIN	\$4.95 ea - 10+ \$4.65 ea
Cat. PI-6499	40 PIN	\$6.50 ea - 10+ \$6.20 ea



Header Plugs

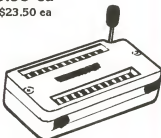
'Header Plugs' will plug into a standard IC socket. They will allow you to solder components into a circuit via the IC socket.

14 Pin Cat. PI-6524	\$2.85 ea	10+ \$2.65 ea
16 Pin Cat. PI-6525	\$3.25 ea	10+ \$3.00 ea
24 Pin Cat. PI-6526	\$3.95 ea	10+ \$3.70 ea



ZIF (Zero Insertion Force) Sockets

24 Pin	
Cat. PI-6522	\$21.95 ea
10+ \$20.50 ea	
28 Pin	
Cat. PI-6523	\$26.95 ea
10+ \$23.50 ea	

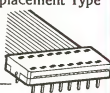


Insulation Displacement Type Header Plugs

14 Way
Cat. PI-6549

\$1.95

10+ \$1.75 ea



16 Way

Cat. PI-6550

\$2.25 10+ \$2.00 ea

24 Way

Cat. PI-6555

\$3.95 10+ \$3.70 ea



40 Way

Cat. PI-6558

\$4.95 10+ \$4.60 ea

ALL INCLUDE CAP

IC Sockets - Packs

The economical way to buy quality tinned IC

100 x 8 PIN

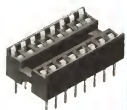
Cat. PI-6478

\$15.50

100 x 14 PIN

Cat. PI-6480

\$16.95



100 x 16 PIN

Cat. PI-6482

\$19.95

100 x 18 PIN

Cat. PI-6484

\$23.95



Mixed Pack IC Sockets

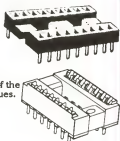
Consists of:

- 15 x 8 pin
- 20 x 14 pin
- 20 x 16 pin
- 10 x 18 pin
- 5 x 20 pin
- 10 x 22 pin
- 5 x 24 pin
- 5 x 28 pin

10 x 40 pin More of the more common values.
Cat. PI-6490
(\$37.00 value)

\$24.95

pkt of 100



Din 41612 2 Part 'C Body' Edge Connectors

Plugs Right Angle PCB Mount

32 way - rows A + C Cat. PP-0930

\$4.50 10+ \$4.10 ea

64 way - rows A + C Cat. PP-0932

\$9.65 10+ \$9.15 ea

96 way - Rows ABC Cat. PP-0934

\$12.50 10+ \$11.50 ea

Sockets Straight Pins 4MM Cat. PP-0936

32 way - rows A + C Cat. PP-0936

\$7.50 10+ \$6.95 ea

64 way - rows A + C Cat. PP-0938

\$13.95 10+ \$13.15 ea

96 way - rows ABC Cat. PP-0940

\$17.50 10+ \$16.00 ea



Battery Holders - Snaps

Jaycar carries an excellent range of battery connectors. In line with our usual policy our products are of higher quality than average but cost no more. The holders are moulded in Delryn with corrosive resistant nickel plated springs and studs.

AA, UM-3 or Penlight Cells

4 x AA Square

Cat. PH-9200

90¢ ea

10+ 80¢ ea



2 x AA Side

By Side

Cat. PH-9202

\$1.00 ea

10+ 90¢ ea



4 x AA Side

By Side & End

To End

Cat. PH-9204

\$1.20 ea

10+ \$1.00 ea



6 x AA 2 By 3

Side By Side

Cat. PH-9206

\$1.20 ea

10+ \$1.00 ea



8 x AA 2 Rows

of 4 Square

Cat. PH-9209

\$1.50 ea

10+ \$1.30 ea



C or UM-2 Cells

4 x C Cell 2 Rows

Of 2 End To End

Cat. PH-9216

\$1.85 ea

10+ \$1.60 ea



D Or UM-1 Cells

1 x D Cell

Cat. PH-9218

\$1.20 ea

10+ \$1.00 ea



2 x D Cell Side

By Side

Cat. PH-9220

\$1.85 ea

10+ \$1.60 ea



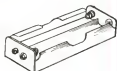
4 x D Cell 2 Rows

Of 2

Cat. PH-9222

\$2.00 ea

10+ \$1.75 ea



9V Or 216 Type Cells

Standard Snap-On

Cat. PH-9230

35¢ ea

10+ 30¢ ea



Button Cell Battery Holder

• PCB Mount

• Will take all common silver oxide cells + small lithium batteries etc.

• Gold plated contacts

Cat. PH-9225

\$2.95 ea

10+ \$2.50 ea

"Lantern" Type

Torch Battery

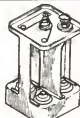
replacement

Holder

Replace expensive lantern batteries with this holder and use 4 x D size instead.

Cat. PH-9238

\$6.95 ea



Pin Headers

Pin Headers & Socket Terminal Strips For PCB's

Great for PCB mass terminals

Vertical Launcher

0.1" Pitch 8 Way

Cat. HM-3210

\$1.50 ea

10+ \$1.40 ea



Right Angle

Launcher 0.1"

Pitch 3 Way

Cat. HM-3213

75¢ ea

10+ 65¢ ea



4 Way Not Illustrated

Cat. HM-3214

95¢ ea 10+ 85¢ ea

8 Way

Cat. HM-3215

\$1.85 ea

10+ \$1.75 ea



8 Way Connector Socket Not Illustrated

Cat. HM-3220

\$1.75 ea 10+ \$1.65 ea

PCB Pins

Pins and sockets for easy termination of wire on PCB boards.

Pins - 0.9mm

Cat. HP-1250

\$1.90 pkt 50

10+ \$1.70



Socket to suit

HP-1250

Cat. HP-1260

\$3.25 pkt 25

10+ \$3.00



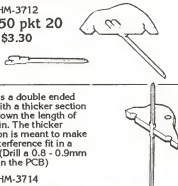
Wire Wrap Pins

Both pins will take three levels of wrap, are 0.025" (0.63mm) square. The HM-3712 is a single sided pin terminated at the short end with a slot. Supplied in packs of 20.

Cat. HM-3712

\$3.50 pkt 20

10+ \$3.30



This is a double ended pin with a thicker section 2/3 down the length of the pin. The thicker section is meant to make an interference fit in a PCB (Drill a 0.8 - 0.9mm hole in the PCB)

Cat. HM-3714

\$3.50 pkt 20

10+ \$3.30



Crystal Socket

Socket to suit small size crystals

Cat. PS-1300

60¢ ea

10+ 55¢ ea



Contact Connectors

Simply wrap around the existing wire and new wire and squeeze.

Connector cuts through insulation and makes contact without damaging the conductor. Fully insulated once on.

Cat. HP-1206

\$1.25 pkt 4

Cat. HP-1207

Pkt 15

Special Price

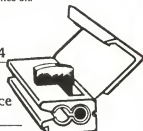
\$2.95

Cat. HP-1208

Pkt 100

Special Price

\$12.50



DIRECT IMPORT

TO-3 Cover

Made of black plastic to cover TO-3 transistors mounted on the outside of cases.

Cat. ZM-9902

75¢ ea

10+ 65¢ ea



Transistor Socket

TO-3 Economy Phenolic Type

Cat. PS-2300

40¢ ea

10+ 35¢ ea



TO-3 Insulating Kit

Mica washers and bushes for TO-3 style
Cat. HP-1122
\$1.30 pkt 4
10+ **\$1.20** per pkt
Cat. HP-1120
\$24.95 pkt 100
10+ **\$23.00** per
pkt



TO-220 Insulating Kit

Mica washers and bushes for TO-220 or any flat pack transistor.
Cat. HP-1142
95¢ pkt 4
10+ **85¢** per pkt
Cat. HP-1140
\$14.50 pkt 100
10+ **\$13.50** per
pkt



Car Aerial Extension Leads

1 Metre
Cat. AA-2094
\$4.95

3.5 Metre
Cat. AA-2096
\$8.95



Car Radio Antenna

Standard Lockdown Replacement car radio antenna complete with plug and lead, 4 stage, 820mm long with 2 keys.

Cat. AA-2090
\$7.95



Car Radio Suppression

Condenser Noise Suppressor
Cat. AA-3060
\$1.75
10+ **\$1.50** ea



IGNITION COIL

Hot Line Filter

For CB radio and car cassette player use. Eliminates or reduces ignition noise thru 'hot' wire or positive lead to battery. Complete with capacitor.
Cat. AS-3070
\$6.95



CB Base

Standard 3/8" base for mounting helical whips on a fender.
Cat. DC-3060
\$5.50



Audio/Video Adaptors

3.5mm Plug to RCA Socket
Cat. PA-3500
\$1.95
10+ **\$1.80** ea



6.5mm Plug to 3.5mm Socket
Cat. PA-3504
\$1.95
10+ **\$1.80** ea



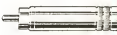
3.5mm Plug to 6.5mm Socket
Cat. PA-3506
\$1.95
10+ **\$1.80** ea



RCA Plug to 3.5mm Socket
Cat. PA-3508
\$1.95
10+ **\$1.80** ea



RCA Plug to 6.5mm Socket
Cat. PA-3510
\$1.95
10+ **\$1.80** ea



Dual 3.5mm Stereo Plug to 2 x 3.5mm Stereo Sockets
Cat. PA-3582
\$4.95
10+ **\$4.75** ea



3.5mm Plug to 3.5mm Stereo Socket
Cat. PA-3584
\$1.95
10+ **\$1.80** ea



3.5mm Stereo Plug to 6.5mm Stereo Socket
Cat. PA-3586
\$1.95
10+ **\$1.80** ea



6.5mm Mono Plug to 6.5mm Stereo Socket
Cat. PA-3588
\$1.95
10+ **\$1.80** ea



6.5mm Stereo Plug to 3.5mm Stereo socket
Cat. PA-3590
\$1.95
10+ **\$1.80** ea



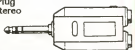
6.5mm Plug to RCA Socket
Cat. PA-3592
\$1.95
10+ **\$1.80** ea



3.5mm Plug to 6.5mm Stereo Socket
Cat. PA-3594
\$1.95
10+ **\$1.80** ea



6.5mm Stereo Plug to 2 x 6.5mm Stereo Sockets
Cat. PA-3595
\$4.95
10+ **\$4.75** ea



6.5mm Stereo Plug to 2 x 3.5mm Stereo Sockets
Cat. PA-3597
\$4.95
10+ **\$4.75** ea



RCA Socket to RCA Socket
Cat. PA-3598
\$1.95
10+ **\$1.80** ea



RCA Plug to 2 x RCA Socket
Cat. PA-3560
\$4.95
10+ **\$4.75** ea



PL259 Plug to RCA Socket
Cat. PA-3650
\$3.95
10+ **\$3.75** ea



PL259 Plug to BNC Socket
Cat. PA-3652
\$4.95
10+ **\$4.75** ea



BNC Plug to RCA Socket
Cat. PA-3654
\$4.95
10+ **\$4.75** ea



SO239 Socket to BNC Plug
Cat. PA-3656
\$4.95
10+ **\$4.75** ea



RCA Plug to BNC Female
Cat. PA-3655
\$4.95
10+ **\$4.75** ea



Personal Shoppers

Don't forget to call in early in the month to buy your new copy of Silicon Chip and Electronics Australia. We generally have them available before they arrive in newsagents.

Shielded Audio Cable

Single shielded PVC covered, light duty cable. Ideal for patch cords, small microphones, amplifier wiring, etc. Grey in colour. Cat. WB-1500

40¢ metre

\$34 per 100 metre roll



Fig.8 Twin Screened

Two grey PVC covered individually shielded conductors. Screens electrically separated. Cat. WB-1502

60¢ metre

\$50 per 100 metre roll



Round

Twin screened pair (not balanced). Enclosed in a thick wall PVC jacket. Cat. WB-1504

60¢ metre

\$50 per 100 metre roll

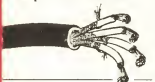


Round

4 conductors each shielded and encased in one PVC covering. Ideal for DIN plug and socket wiring. Cat. WB-1510

\$1.25 metre

\$100 per 100 metre roll



Low Capacitance

Special single screen low capacitance audio cable. Suited for high quality amplifiers. As used in our ETI Black Monolith MOSFET power amplifier. Blue in colour. Cat. WB-1530

\$1.90 metre

\$150 per 100 metre roll



300 Ohm TV Ribbon

The standard flat clear ribbon used by so many for so long. Suitable for indoor and outdoor, low loss and maintains perfect balance. Cat. WB-1800

30¢ metre

\$25 per 100 metre roll

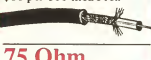


75 Ohm Light Duty TV Coax

Designed for colour TV aerial systems. Suitable for up to 400MHz. Black insulation and braided shield. Cat. WB-2000

80¢ metre

\$60 per 100 metre roll



75 Ohm Heavy Duty TV Coax

As above but heavier gauge. Suited for long runs and general lower loss. 2.6dB less loss per 100 feet than WB-2000. Cat. WB-2004

\$1.00 metre

\$85 per 100 metre roll



75 Ohm Air Spaced High Quality TV Coax

SPECIFICATIONS:
O.D. 6.5MM, 5 cell P.E. dielectric, aluminium/Mylar foil shield and 48/0.12mm copper braid giving 100% shielding, dB loss per 100 metres 50MHz/5.4dB, 200MHz/9.2dB, 470MHz/14.4dB, 700MHz/17.7dB, 800MHz/19.9dB. Capacitance (1kHz) 5.5nF. Cat. WB-2006

\$1.20 metre

\$100 per 100 metre roll.



Fig 8 White 240V

Power Flex

Figure 8 wire, white in colour, suited for lights and general 240V work not requiring an earth. Rated at 7.5 amp

Cat. WB-1560

60¢ metre

\$55 per 100 metre roll



Three Core Mains

Standard 240V 3 core grey 10 amp power cable. For all your mains wiring. Cat. WB-1562

\$1.50 metre

\$135 per 100 metre roll



Light Duty Fig 8 Speaker

Ideally suited for Hi Fi systems, intercoms, etc. One conductor marked so polarity is not reversed. Grey with black trace. 14 x 0.14mm. Cat. WH-1702

25¢ metre

\$19 per 100 metre roll

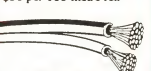


Medium Duty Fig 8

Suited to amplifiers up to 150 watts. Size 19 x 0.193mm. One side has trace for correct polarity connection. Cat. WB-1706

40¢ metre

\$30 per 100 metre roll



Heavy Duty Fig 8

Suited for speaker systems above 150 watts. Colour coded. Cat. WB-1708

45¢ metre

\$33 per 100 metre roll



Heavy, Heavy Duty Fig 8

If you want something better than our heavy duty speaker cable, and the Jumbo cable is too large and expensive, then this is what you need. It is 2 x 79/0.2mm, which is exactly 1/2 the wire content of the Jumbo cable but still 3 times thicker than the heavy duty cable. White with black trace. Cat. WB-1712

\$1.50 metre

\$120 per 100 metre roll



Jumbo Speaker Cable

For the audiophile who wants the best of speaker cable. Figure 8, 259 strands in each side, DC resistance 0.003 ohms per foot. Inductance 0.23uH per foot. You can hear the difference. Cat. WB-1732

\$4.20 metre

\$390 per 100 metre roll



Flexible Light Duty Hook-up Wire

10 x 0.12mm Suited for all general purpose wiring work. 8 different colours available.

Cat. WH-3010 RED
Cat. WH-3011 BLACK
Cat. WH-3012 BROWN
Cat. WH-3013 ORANGE
Cat. WH-3014 YELLOW
Cat. WH-3015 GREEN
Cat. WH-3016 BLUE
Cat. WH-3017 WHITE

16¢ metre

\$10 per 100 metre roll



Flexible Light Duty Hook-up Wire - 25m Rolls

Now our hobbyists can afford to have a roll of each colour hook-up wire by their work bench. Quality 13/0.12 tinned hook-up wire on plastic spools.

Red	Cat. WH-3000
Yellow	Cat. WH-3004
Black	Cat. WH-3001
Green	Cat. WH-3005
Brown	Cat. WH-3002
Blue	Cat. WH-3006
Orange	Cat. WH-3003
White	Cat. WH-3007



\$3.95 per reel

BUY ONE ROLL OF EACH COLOUR - 8 ROLLS IN ALL FOR ONLY \$25.95
Cat. WH-3009

Heavy Duty Hook-up

24 x 0.2mm
Suitable for 250V wiring and general heavy duty work. Rated at 7.5 amps.

Cat. WH-3040	RED
Cat. WH-3042	GREEN
Cat. WH-3041	BLACK

30¢ metre

\$25 per 100 metre roll

Extra Heavy Duty Hook-up

24 x 0.2mm
Suitable for 250V wiring and general heavy duty work. Rated at 7.5 amps.

Cat. WH-3050	BROWN
Cat. WH-3052	BLUE

35¢ metre

\$26 per 100 metre roll

3mm Auto Cable on 9m Rolls

The economical way to buy auto cable. Seven colours available on handy 9.25 metre rolls. Every car should have a roll in the tool box.

Cat. WH-3080	RED
Cat. WH-3081	BLACK
Cat. WH-3082	BROWN
Cat. WH-3083	YELLOW
Cat. WH-3084	GREEN
Cat. WH-3085	BLUE
Cat. WH-3086	WHITE

\$4.50 per reel

Curly Cord

1.8 metre 3 conductor curly cord for microphone replacements etc. Cat. WA-1090

\$5.50



IDC Ribbon Cable

Designed for IDC connectors. Grey in colour.
Cat. WM-4502 16 way \$1.95 metre
Cat. WM-4504 25 way \$2.95 metre
Cat. WM-4506 34 way \$3.95 metre
Cat. WM-4508 50 way \$5.50 metre



Rainbow Cable

Colour coded strands of insulated conductor bonded together in a flat cable. Ideal for rewiring looms, can be split and each individual wire used. Same rating as 13 x 0.12mm light duty hook-up wire.
Cat. WH-4510 10 core \$2.50 metre
Cat. WH-4516 16 core \$3.75 metre



50 Ohm Light Duty RG58AU

Suited up to 500MHz. Ideal for CB radio, marine, amateur and two-way radio.
Cat. WB-2010

80¢ metre

\$60 per 100 metre roll

4 Core Alarm Cable

4 core, flexible stranded conductors (7 x 0.18) in tough outer sheath.
Cat. WB-1590

75¢ metre

\$60 per 100 metre roll



Microphone Cable

High quality black PVC covered with cotton fluff. Size 14 x 0.18mm. Conductor O.D. 4.6mm.
Cat. WB-1520

\$1.40 metre

\$120 per 100 metre roll



Microphone Cable - Twin

High quality twin shielded with tinned braided copper, which makes it ideal for balanced line microphones. O.D. 5.2mm
Cat. WB-1524

\$2.10 metre

\$185 per 100 metre roll



Computer Cable

Two cables suited for computers, etc Both are shielded to stop RFI.
6 WAY Cat. WB-1575

\$1.65 metre

\$130 per 100 metre roll

9 WAY Cat. WB-1578

\$2.20 metre

\$180 per 100 metre roll



Telephone Type Cable

Similar to what Telecom use for telephone wiring. Single core cable each PVC covered and in an outer cable. Three types available. Great for Intercoms, alarm wiring etc.

Cat. WB-1602 2 pair (4 wire)
65¢ metre \$50/100m roll
Cat. WB-1603 3 pair (6 wire)
85¢ metre \$65/100m roll
Cat. WB-1610 10 pair (20 wire)
\$1.95 metre \$150/100m roll



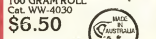
Tinned Copper Wire

Two handy sizes of 22 swg (0.71mm) for wire links, etc. APPROXIMATELY 6 METRES IN A PACK

\$1.95

100 GRAM ROLL

\$6.50



Wire Wrap Wire

Assorted colours and lengths of popular wire for wire wrapping.

Cat.	WW-4310	Colour	Pack
		Black	100
		Blue	100
		Green	100
		Red	100

Length 3.5'

ALL ONE PRICE \$5.95 ea

Cat. WW-4330 Black 100

Cat. WW-4332 Blue 100

Cat. WW-4334 Green 100

Cat. WW-4336 Red 100

Length 5.5'

ALL ONE PRICE \$6.95 ea



We have been after this for years, and have finally found it. It's high quality SILVER PLATED (other companies sell wire which is not silver plated) on 50 foot spools. Available in 4 colours.

RED Cat. WW-4340

BLACK Cat. WW-4341

BLUE Cat. WW-4342

GREEN Cat. WW-4343

\$6.50 per reel

That's only 13¢ per foot!



Wire Wrap Wire Bargain

Another Jaycar surplus stock purchase. Two sizes available. Both supplied in 5 metre lengths. High quality U.S. made in 24 and 28 gauge.

24g 5 metre Cat. WW-4350

28g 5 metre Cat. WW-4355

\$1.50 each



Mini Teflon Pack

Very high quality, small diameter Teflon coated 75 ohm, 1 metre lengths

Cat. WB-2300 \$3.95

BUY IN BULK AND SAVE

Due to our bulk buying we can offer bulk packed lengths at special prices.

Cat. WB-2302 4 metres

\$10.00

Cat. WB-2304 10 metres

\$20.00

Cat. WB-2306 50 metres

\$75.00



Enamel Copper Wire

mm	BES	Wgt	SWG	Approx Length (m)	
WW-4008	0.125	36	25g	40	\$4.75
WW-4010	0.2	32	25g	36	\$4.75
WW-4012	0.25	30	25g	33	\$4.75
WW-4013	0.3	28	25g	31	\$4.75
WW-4014	0.4	26	25g	28	\$4.75
WW-4016	0.5	24	100g	25	\$5.95
WW-4018	0.63	22	100g	23	\$5.95
WW-4020	0.8	20	100g	21	\$5.95
WW-4022	1.0	18	100g	19	\$5.95
WW-4024	1.25	16	100g	18	\$5.95

For winding chokes, crossovers coils etc. Supplied on its own plastic reel.



Tonearm Cable

This is extremely rare. We have been looking for it for years. It has 4 separate wires twisted together, with a total diameter of about 2mm. As used in turntables to connect from back of cartridge to innards of turntable.

1 metre length

Cat. WH-3035 **\$2**



Ultra Thin Shielded Cable

Quality English made shielded cable with a total diameter of 1mm. Ideal for wiring in small places.

PACKET OF 5 METRES

Cat. WB-2310

\$2.50



El Cheapo Desoldering Braid/Earth Braid

This braid is 2mm wide and will take solder off a PCB reasonably well, although it is not loaded with flux. It won't work as well as normal desolder braid, though. Supplied in a 5 metre length for \$1.25. That's only 25¢ metre compared with normal desolder wick at \$1.50 per metre. Also suitable for earth braid.

Cat. NS-3025

\$1.25 5 metre length



Breadboard Jumper Kit

We supply a pack of 5 metres of both red and white solid core hook-up wire. It is the ideal size for breadboards. All you need to do is cut it up into whatever lengths you require and strip the ends. Don't pay lots of money for pre-cut wire in a plastic box.

Cat. WH-3030

\$1.95



Hook-Up Wire Pack

2 metres of 8 different colours of

10 x 0.12mm hook-up wire.

16 metres in all.

Cat. WH-3025

\$2.50



Spaghetti Pack

A bag of assorted sizes of plastic

tubing suited for many uses.

Cat. WS-5502

\$3.50

Wire Stripper 'T' Rex

Our wirestripper, nicknamed 'Tyrannosaurus Rex' is far from extinct! It's a great way to strip all sorts of cable without damaging the conductors.

- Automatically adjusts to insulation diameter
- One hand operation

Cat. TH-1824



\$12.95

Heatshrink Tubing

Jaycar proudly introduces a new range of high quality heatshrink tubing from Japan. Available in two colours, both in one metre lengths with an extended range of sizes over last year's range. Our new range can be shrunk with a match. Simply place the heatshrink over the item to be insulated or protected and heat to form a permanent covering.

- New colour
- New sizes
- Shrink with a match
- Remains flexible after shrunk

1.5mm Red WH-5540 1.5mm Black WH-5530 **\$1.85**

2.5mm Red WH-5541 2.5mm Black WH-5531 **\$1.85**

3.5mm Red WH-5542 3.5mm Black WH-5532 **\$1.95**

5mm Red WH-5543 5mm Black WH-5533 **\$2.25**

7mm Red WH-5544 7mm Black WH-5534 **\$2.50**

10mm Red WH-5545 10mm Black WH-5535 **\$2.75**

16mm Red WH-5547 16mm Black WH-5537 **\$3.95**

SOLD IN 1 METRE LENGTHS SHRINKS TO 1/2 SIZE



Assorted Heatshrink Pack

Handy assortment of our new high quality heatshrink tubing in red and black.

Sizes from 1.5mm to 10mm.

10 pieces in all of 300 & 150mm length.

GREAT VALUE

Cat. WH-5525

\$6.95



Jumper Lead Kit

10 x 380mm leads, with alligator clip each end.

5 different colours. Thick cable between clips so they won't break.

Cat. WC-6010

\$5.95



Wire Stripper, Cutter & Pliers

High quality toughened wire stripper will strip wire sizes from 0.5mm to 6mm. Also includes a wire cutter and pliers.

Made of alloy steel with hardness and industrial surface treatment and comfortable plastic grip handles. Length 150mm.

Another Jaycar direct import saves you money.

Cat. TI-1825

\$7.95



Pro II Headphone/Microphone

A comfortable set of large aircraft style headphones with Hi Fi performance and a 600 ohm omni-directional boom microphone. The uses are endless. The mic is mounted in a superb gymbal mount which adjusts so that the mic is positioned close to the front or side of the wearer's mouth.

- CB'ers
- Amateur radio mobile
- Rock groups

Cat. AA-2020

\$42.95



SPECIFICATIONS

Headphone:
40mm diameter Mylar drivers
400mW max input power
Impedance 28-32 ohms
Cord length 6 foot

Microphone
Type dynamic
Omni-directional
Impedance 600 ohm
Sensitivity -84dB @ 1kHz
Cord length 7 foot

Headset/Microphone

As used with Speakerphone kit - see kit section. Ideal for office situations where other people may be distracted by the two way conversation. These headsets have been especially imported by Jaycar. They are lightweight, designed for telephone use and only have one earpiece for comfort and still allows conversations with other workers. The boom is fully adjustable for the best position.

\$16.95



Inner Ear Mini Stereo Phones

Unique type headphones, so small they can be stored in a MATCHBOX. Very high sound quality and comfortable to use. Supplied with adaptor plug to 6.5mm and spare replacement ear pads.

\$8.95



Sennheiser Muffs

Genuine factory made spare foam earpads for the famous Sennheiser HD-414 phones.

Cat. AA-2011



\$14.95 per pair

Mini Muffs

Foam earpad replacements for mini headphones. 27mm diameter - 2 pairs.

Cat. AA-2012



\$3.75

Ultra Light Walkman Phones

Quality phones at a realistic price. Terminates with a 3.5mm stereo plug. 6.5mm adaptor also supplied.

Cat. AA-2016

\$8.95



Crystal Earpiece

Crystal earpiece of high impedance with 3.5mm plug. Suitable for crystal sets or for experimental use.

Cat. AS-3305

\$3.75 10+ \$3.50 ea



Magnetic Earpiece

Magnetic 8 ohm earpiece with 3.5mm plug connected. Suitable for radios, portable TV's, etc. Lightweight and easy to use.

Cat. AS-3300

\$1.25 10+ \$1.10 ea

AS ABOVE

Fitted with 2.5mm plug

Cat. AS-3301

\$1.25 10+ \$1.10 ea



Walkman Speakers

Pair of micro mini stereo speakers. Ideal for Walkman type radios, cassette players.

Cat. AA-2050

\$15.95 pair



TDK Audio Tapes

Cat. AR-1410	D60	Pack of 3	\$ 8.95
Cat. AR-1412	D90	Pack of 3	\$11.95
Cat. AR-1416	AD60	Pack of 2	\$ 7.95
Cat. AR-1420	AD90	Pack of 2	\$10.50
Cat. AR-1425	SA90	Pack of 2	\$13.95



TDK Video Tape

TDK E180 VHS video tape

Cat. AR-1440

\$14.95 ea

Redford Wireless Microphone System

Uses dual diversity autoswitching receivers for long range noise free pure fidelity reproduction. Dynamic range exceeds 100dB. Superb microphone reproduction compares with Shure, etc. Unique microphone design completely eliminates 'dangling' antenna. The operating range is a minimum of 50 metres and often this can be extended to 200 metres or more in normal circumstances. Several frequencies are available to alleviate cross interference when two or more systems are used in proximity. One frequency will only be stocked of each model. If you are purchasing two units we can arrange 2 different frequencies.

BRIEF SPECIFICATIONS

• Mic carrier power: 50mW max • Dynamic range: over 100dB • S/N Ratio: better than 90dB • Frequency Response: 20Hz - 16kHz ± 3 dB • Mic Battery: 4 x AA cells • Battery Life: over 24 hours continuous operation • Receiver Sensitivity: 12dB/ μ V 60dB S/N ratio • Pre-emphasis/De-emphasis: 50 μ S • Receiver Output: unbalanced 6.3mm phone jack and balanced 3 pin Cannon type • Output Level: (Adjustable) Unbalanced 0-2.5V Balanced 0 - .3V into 600 ohms • Receiver Power Supply: 200 - 260V AC

Dual Diversity Receiver
Cat. DT-5050

Entertainment Mic
Cat. DT-5055

Lavalier Mic
Cat. DT-5060

\$729

\$349

\$349



Stereo Mixer with Equaliser

A very professional unit at an affordable price.

FEATURES:

- 6 inputs of which 4 are for microphone or line and 2 for phono incorporating 4 x RCA and 2 x 6.5mm sockets
- Headphone socket with volume control
- Output level VU meters or LED display
- Mic input volume control
- Master volume control
- Fader and cue control
- 5 band equaliser
- 240V operated

\$299



Sensitivity

S/N ratio

Frequency

Channel Bal

T.H.D.

H/P Impedance

Output

Equaliser

Dimensions

SPECIFICATIONS:

Phono 3mV
Mic 1mV
Line (tape or tuner) 150mV
Phono 55dB
Mic 60dB
Line 65dB
Phono 20Hz - 20kHz (RIAA ± 2 dB)
Mic 20Hz - 20kHz ± 3 dB
Line 20Hz - 20kHz ± 3 dB
0.5dB
Less than 0.03%
4 - 16 ohms
0.775V
Centre frequency 60, 250, 1k, 4k, 12k
Control Gain ± 12 dB
15.8"(W) x 10.5"(D) x 3.4"(H)
Cat. AM-4202

Stereo Audio Mixer

This brilliant little mixing console is absolutely packed with features. It allows blending of microphone, two phono inputs and either two tape or tuner inputs.

FEATURES:

- Right and left VU meters
- Separate bass and treble controls
- 5 slide level controls
- Headphone monitor switch
- Talkover facility
- 240V mains operated



Input

Output Frequency Tone Control

Distortion

S/N Ratio

H/P Impedance

Dimensions

SPECIFICATIONS:

Mic 0.5mV 600 ohms
Phono 3mV 50k ohms
Tape/tuner 150mV 100k ohms
250mV
20Hz - 20kHz (± 1 dB)
Treble 10kHz (± 12 dB)
Bass 100Hz (± 12 dB)
Less than 0.07%
More than 60dB
4 - 16 ohms
318(L) x 217(W) x 85(H)mm
Cat. AM-4200

\$169

4 Channel Microphone Mixer

Its size and simplicity make this mixer very portable and easy to operate. It will accept up to 4 low impedance microphones. With power on LED.

SPECIFICATIONS

Inputs

Connectors

Power Source

Output Impedance

S/N Ratio

Freq. Response

Output Level

Dimensions

Cat. A/1-4204

4 low impedance 600 ohm microphone
individual gain control for each microphone
master volume control
Inputs/outputs - 6.35mm mono sockets
9V DC (battery only)
1.5k ohm
55dB
20Hz - 10kHz ± 2 dB
90mV (at input 5mV)
148 x 46 x 86mm

\$54.95



Unidirectional Balanced Top of the Range "A.K.G." Insert

A top quality microphone finished in matt grey. Features the famous "A.K.G." insert fitted into a rubber mounting anti-shock holder. Has on/off switch, Cannon connector and comes with holder.

Type	Unidirectional, balanced line
Impedance	600 ohms (no transformer)
Freq. Response	70Hz - 15kHz
Sensitivity	-77dB
Cord/Plug	5 metre cord/Cannon to 6.35mm plug
Cat. AM-4060	

\$129.50



Unidirectional Balanced Line Dual Impedance

The best all round microphone we could find. Balanced low and high impedance. Fitted with a "Primo" rubber mounted insert. Finished in matt grey, with on/off switch and Cannon connector

Type	Unidirectional - dual Impedance - balanced line
Impedance	600 and 20k ohm
Freq. Response	50Hz - 17kHz
Sensitivity	Lo -76dB, Hi -58dB
Cord/Plug	5 metre cable/Cannon to 6.35mm stereo plug
Cat. AM-4065	

\$115



Unidirectional Balanced Line

A heavy grey metal body microphone, mesh grill fitted with a "POP" filter and on/off switch. Supplied with Cannon connector and mic holder.

Type	Unidirectional - balanced line
Impedance	600 ohm
Freq. Response	50Hz - 15kHz
Sensitivity	-76dB
Cord/Plug	5 metre cable/Cannon to 6.35mm plug
Cat. AM-4062	

\$77.50

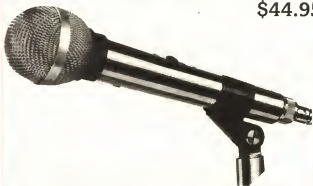


Dual Impedance Unidirectional Dynamic

A quality microphone made from zinc diecast metal with non reflective matt grey finish. Fitted with anti "POP" filter and on/off switch. Complete with cord and microphone clip.

Type	Unidirectional - dual impedance
Impedance	600/50k ohm
Freq. Response	50Hz - 14kHz
Sensitivity	Lo -78dB, Hi -58dB
Cord/Plug	6 metre cable/4 pin to phone plug
Cat. AM-4092	

\$44.95



Low Cost - High Quality Unidirectional

An excellent value for money microphone. Silver in colour, plastic body with black metal grill incorporating anti "POP" filter. Supplied with on/off switch and desk stand.

Type	Unidirectional - low Impedance
Impedance	600 ohm
Freq. Response	100Hz - 10kHz
Sensitivity	-74dB
Cord/Plug	3 metre cable/6.35mm plug
Cat. AM-4090	

\$19.95



Electret Unidirectional

A very popular slimline microphone. Anodised champagne aluminium body, mesh grill with built-in windscreen. Includes mic holder and battery.

Type	Unidirectional - low impedance - electret
Impedance	600 ohm
Freq. Response	20Hz - 20kHz
Sensitivity	-72dB
Cord/Plug	3 metre/6.35mm plug
Battery	1.5V AA type
Cat. AM-4080	

\$29.95



Wireless Microphone

Very easy to use microphone. Finished in matt grey with black mesh grill. Runs on 9V battery for long life.

Type Omnidirectional - electret
Tuneable 92MHz - 104MHz
Freq. Response 50Hz - 15kHz
Range Over 100 metres in open field
Power Source 9V (216) battery
Cat. AM-4072

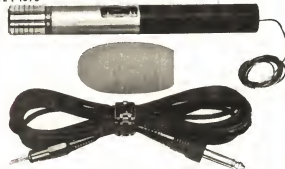


\$19.95

Wireless/Wired Electret

Best of both worlds can be used as a conventional wired microphone as well as a tuneable wireless microphone. Complete with on/off switch, foam windshield and mic holder.

Type Omnidirectional - low impedance - wireless/wired
Tuneable 88MHz - 108MHz
Freq. Response 50Hz - 16kHz
Field Strength 15uV/100m
Impedance 600 ohm
Battery 1.5V AA
Cat. AM-4070



\$41.95

Wireless Microphone and Receiver

Crystal locked FM wireless microphone and receiver at an affordable price. Electret insert in microphone and high-low switch assures adequate sensitivity and output to receiver. Receiver features on/off switch with output volume control and LED power on indicator, also has an AC adaptor inlet socket.

Type Unidirectional - crystal locked wireless system
Transmitting Freq. 37.1MHz
Microphone Electret condenser
Power Supply 9V (216) battery
Range 300 feet in open field
Receiving Freq. 37.1MHz
Power Supply 9V battery or 9V power adaptor
Output 30mV via 3.5mm plug
Cat. AM-4075



\$109.95

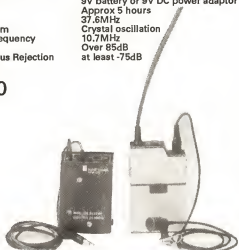
Crystal Locked Wireless Microphone System

Adds a new dimension to video movie capabilities by allowing the miniature wireless microphone to be attached inconspicuously on the subject. The receiver attaches to the video camera, no longer will noise between camera and subject cause annoying interference.

SPECIFICATIONS - TRANSMITTER
Power Supply 3 x UM3/AA 1.5V batteries
Battery Life Approx 30 hours
Standard 37.6MHz
Transmitting System Crystal oscillation
Microphone Element Electret
RF Power 200 feet (open field)
Frequency Stability 0.005%
Frequency Range 70Hz - 12kHz

SPECIFICATIONS - RECEIVER
Power Supply 9V battery or 9V DC power adaptor
Battery Life Approx 5 hours
Standard 37.6MHz
Receiving System Crystal oscillation
Intermediate Frequency 10.7MHz
S/N Ratio Over 85dB
Image & Spurious Rejection at least -75dB
Cat. AM-4076

\$139.50



Cassette Microphone

Famous Sanyo brand hand held small microphone fitted with cable and 3.5mm plug.

Limited quantity.
Cat. AM-4095

\$4.95



Unidirectional Wireless Tie Clasp Microphone

This incredibly small microphone just clips on your tie or collar and transmits on FM.

No more messy wires to trip over!
• Tuneable 88MHz - 108MHz FM
• Frequency Response 100Hz - 10kHz
• Electret condenser type
Cat. AM-4068



\$29.50

Quality Tie Clasp Microphone

Low impedance, omni-directional electret condenser. A very small microphone which clips on to your tie. Supplied with 3 metres of cable to a 3.5mm plug. 1k ohm impedance.

Frequency response 40 - 16kHz.
Cat. AM-4067

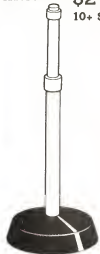


\$26.95

Microphone Desk Stand

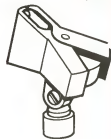
Quality toughened metal stand with adjustable height for any size desk.

Cat. AM-4120 **\$27.50**
10+ \$26.00 ea



Microphone Holder

Unique new universal holder. It has a powerful spring loaded clamp which will fit almost all microphones.
Standard 5/8" x 27 thread.
Cat. AM-4100



\$6.75

Flexible Gooseneck

Standard metal gooseneck. 5/8" male to 5/8" female.
15cm long.

Cat. AM-4115 **\$5.50**

SAME AS ABOVE BUT 33cm LONG

Cat. AM-4125 **\$9.95**



Telescopic Floor Stand

Quality, stable floor stand. Single draw telescopic stem fitted with friction grip and dual screw adaptor, 3/8" and 5/8" for microphone holder.

HEIGHT 96cm to 154cm
WEIGHT 3.4 kg
Cat. AM-4122 **\$57.50**



Microphone Wind Shield

All four models are black and suit most microphones.

Made of sponge rubber.

Cat. AM-4131 20 - 22mm

\$5.50

Cat. AM-4132 23 - 25mm

\$5.50

Cat. AM-4133 33 - 36mm

\$6.50

Cat. AM-4134 36 - 42mm

\$6.75



Miniature Mic Insert

Brand new omnidirectional mini mic insert. Ideal for all those miniature circuits. Only 6mm diameter.

Operating Voltage

1.5 to 15V DC

Current Consump.

0.5mA or less (6V supply)

Frequency Range

40 - 10,000Hz

Output Impedance

same as load resistance (150 ohm - 5k ohm)

Sensitivity

66dB \pm 3dB

S/N Ratio

More than 40dB

Size: 3.5mm x 6mm dia.

Cat. AM-4008

\$2.20

10+ \$1.90 ea



Mic Insert

Great replacement electret mic inserts for tape recorders, etc. Handy for hobby projects. Includes data sheet and applications circuit. Operates from a single 1.5V battery. 10mm diameter. 50Hz - 15kHz. (Used by OEM's).

Cat. AM-4010

\$1.95

10 or more \$1.65 each



Unidirectional Electret Insert

A direct import unit that is ideal for the EA Parabolic Microphone project in November 1983 EA. Average sensitivity around 7dB BETTER than the common low cost electret insert. The insert has a front-to-back ratio of 1.5:1. The power requirements are the same as for the low cost mic insert. Each insert is supplied with a comprehensive data sheet which includes connection details, specifications and frequency response graph.

Cat. AM-4012

\$5.50

10 or more \$5.00 each



Ultrasonic Transducers

These units operate at 39kHz, are of high sensitivity and directional design. They are suitable for Burglar Alarms, Movement Detectors and Interrupted Beam. They are sold as a transmit and receive pair.

Cat. AU-3850

\$13.95 pair



Ultrasonic Transducers for Vehicles

As used in many professional car burglar alarms. Consists of a separate transmitter and receiver which are covered by a rubber boot with a metal clip for easy mounting. Supplied with 2 metres of shielded cable. 12mm diameter, 40kHz frequency.

Cat. AU-3855

\$19.95 pair



Microphone Holder

Plastic holder with a taper for holding 22mm diameter microphone with a 3° taper. Standard 5/8" x 27 thread. Black in colour.

Cat. AM-4105

\$4.95

10 up \$4.50 ea



Keyless 4 Sector Alarm Panel

The latest addition to our range of alarm equipment. The LA-5170 is a reliable and versatile panel designed for residential and commercial systems. It employs the latest electronic circuitry and the most up-to-date security technology. It has 4 independent and isolated protection circuits which accept both normally open (N.O.) and (N.C.) normally closed switches and are sealed with end of line resistors. Two independent siren drivers with tamper proof, two output relays, two auxiliary output supplies for peripheral accessories and the facility for multi-remote station connections are also employed.

FEATURES AND SPECIFICATIONS

- **SECTOR 1** 24 hour instant emergency circuit protects siren covers and outside buildings continuously even when alarm is off
 - **SECTOR 2** Perimeter instant circuit
 - **SECTOR 3** Interior instant circuit
 - **SECTOR 4** Interior delay circuit
 - All sectors sealed with 10k end-of-line resistor for total security. This means that if a wire is cut the alarm will go off
 - All sectors can be isolated independently
 - All sectors accept both N.C. and N.O. switches
 - 5040 combination alarm/disarming code, easily changed
 - Exit delay - 60 seconds typical
 - Entry delay - 2-90 seconds adjustable, with selectable "beep"
 - Siren duration 0.5 - 10 minutes adjustable
 - More than one remote on/off keyswitches/keypads can be connected and connecting wires are tamperproof.
 - 12 volt DC outputs for running accessories/sensors, one switched and one continuous
 - Alarm outputs
 - latching relay with 3 amp N.O. dry contact
 - Timing relay with 3 amp N.O. dry contact
 - 2 independent driven outputs for 8 ohm horn speakers, tamperproof.
 - Panic button on alarm panel
 - Dimensions 258(H) x 172(W) x 74(D)mm
 - Net weight 1.9kg
 - Gel Battery to suit 1.2 amp Cat. SB-2480 \$22.50
 - Power supply to suit 16V AC Cat. MP-3021 \$29.50
- We believe this is one of the best alarm panels we have evaluated. We have seen numerous other panels with less features that cost more. Cat. LA-5170

\$259



Keyless Alarm Control Panel

FEATURES AND SPECIFICATIONS

- Five Protection Circuits
 - one 24 hour NC instant circuit
 - one 24 hour NO circuit
 - one NC instant circuit
 - one NC delay circuit
 - one NO delay circuit

• Burglary

Intelligent Siren driver changes Alarm Tone for different events

- Drives 2 x 8 ohm horn speakers maximum

Adjustable entry delay and siren duration timer

- Entry delay 1 - 30 seconds
- Siren duration 0.5 - 10 minutes with auto reset

60 second exit delay - for all protection circuits

Separate siren drivers for burglary and emergency circuits

Two Independent NO relay output contacts

Timing relay contact with auto reset time according to siren duration

Latching relay contact with status stays close after alarm condition

Auxiliary 12V/300mA DC output

Continuous and controlled on/off by key switch available

For powering accessories, such as motion detectors, smoke detector, photoelectrics, etc

Audible alarm status indication

Exit delay period - short 'BEEP' at half second interval (selectable for silent exit)

Entry delay period - 2 second 'BEEP' at quarter second interval (selectable for silent entry)

Alarm testing - 2 second 'BEEP' at quarter second interval

Tampering - 2 second 'BEEP' at quarter second interval

Low battery - short 'BEEP' at 8 second interval

6 LED lamps on panel indicating alarm status

24 hour panic button mounted on panel

More panic buttons can be mounted at remote locations

Alarm on/off by digital access key

One remote key can be mounted on other location (digital keypad or electromechanical key switch are possible)

Complete tamper proof system

Tamper proof for remote key

Tamper

Tamper proof for siren horns

Tamper proof plus locking cam lock for cabinet

Built-in test switch for convenient testing

Disables the siren driver and output relays and enables the internal buzzer in testing to prevent noise pollution

Built-in main power on/off switch for easy service

Switches on and off the whole system

Built-in charging circuit selectable

Allows use of rechargeable battery or dry cells as back-up power

Cat. LA-5168

\$209

Power supply to suit 16V AC Cat. MP-3021

\$29.50

Back-up battery Cat. SB-2480 \$22.50



Alarm Control Panel

This low cost, but professionally made steel encased alarm has most of the main features of professional control boxes including:

- Lockable baked enamel steel box including tamper switch
- 3 sectors NO or NC
- Trigger instantaneously if any sensor wiring
- Space in box for back-up battery
- 24 hour instant circuit that is not governed by keyswitch, for smoke detector, etc.
- Facility to connect remote keyswitch (Alarm will latch if remote wiring is cut, whether alarm is 'off' or 'on')
- Built-in siren driver
- Relay output control provides 12V DC for bells, sirens, etc.
- Diagnostic audible and visual alarm status indicators
- Simple one key operation. Ideal for non-technical people to operate once installed.
- Dimensions 230(H) x 170(W) x 70(D)mm
- Net weight 1.8 kg

Cat. LA-5162

\$129

SAVE \$20 on 1988 Price

Gel battery to suit

Cat. SB-2480 \$22.50

Power supply to suit 16V AC

Cat. MP-3021 \$29.50



Digital Access Keypad

This keypad is designed to be mounted near your exit/entry point allowing your panel to be safely hidden elsewhere. The LA-5160 digital access keypad is a 12 button electronic coded combination lock. It provides two sets of secret codes, there are 11,880 different combinations possible for security key and 132 for panic. The keypad is mounted on a brushed stainless steel mounting plate which is designed to fit into a single electrical gang box, or flush mounting. It incorporates a normally closed tamper switch, and is suited for most kinds of security systems and electronic door strike applications. It is a simple system which is easy to use (even for kids) but virtually impossible to beat. Ideal for use with our new alarm panel LA-5162. Wiring details supplied with alarm panel.

Cat. LA-5160

\$109.50



Passive Infra Red Detector with Pulse Count Triggering

The absolute latest technology is used in this PIR. It employs a pulse count triggering circuit which virtually eliminates false alarms.

Here's how it works. The circuit first senses an alarm (pulse 1) and then goes into alarm standby mode for 30 seconds duration. If during the 30 second standby mode a second alarm event occurs (pulse 2), the detector goes immediately into alarm, and the standby period will be extended for another 30 seconds. If there is no second alarm pulse during the 30 second standby mode the detector returns to normal condition. The unit is also selectable for single shot triggering. The LA-5019 also has dual element pyroelectric sensor incorporating 'daylight' filter designed to provide immunity from common mode signals such as the effect of strong hot or cold air currents, variation in ambient temperature, background radiation and acoustic noise.

FEATURES

- Dual element pyroelectric sensor
- Pulse count triggering circuitry
- Fresnel lens array large coverage
- 24 dual element detection zones
- For long, mid and short range protection
- Surface or corner mounting without extra accessories.

SPECIFICATIONS

- Detection Pattern** 84.2° angle span, 12 metre range
24 dual element zones in 3 layers
- Detection Zones** One pattern locator, one alarm/walk test indicator
2 metres above floor, 13.96° angle of tilt on back plate
- LED Indicators** Indoor only. Flat surface or corner mount
- Mounting Height** 10.5 - 16V DC
15mA typical
- Mounting Location** Dual element pyroelectric sensor with daylight filter
- Operating Voltage** Pulse count or single shot selectable
- Quiescent Current** NO (fail safe) contacts, 0.5A/24V rating
- Sensor** 2 seconds typical, NC when depressed, 0.5A/24V rating
- Triggering Mode** Test point analysing
- Alarm Output** 115 x 74 x 73mm
- Alarm Period** 160 gram
- Tamper Contact**
- Testing Output**
- Dimensions**
- Weight**

Cat. LA-5019

\$139



Passive Infra Red Detector - Price Breakthrough

It had to happen! Jaycar was the first to offer pulse count PIR's and lately we were the first to offer pulse count for less than \$100. We are proud to announce another first in PIR's.

A QUALITY PIR FOR ONLY \$69.95 FULL PRICE.

Sure, you are probably thinking "but what about the quality and reliability". There's nothing worse than an alarm system that false triggers, you know the old story about the boy who cried wolf.

We have extensively tested the units and have no doubt about their quality and operation ability.

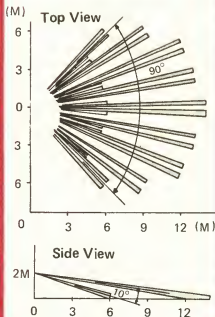
FEATURES AND SPECIFICATIONS

- Dual element pyroelectric sensor
- 24 dual element detection zones in three layers
- Wide angle 90° multi layer coverage
- 12 metre range
- Operation voltage 7.5 - 16V DC
- Tamper protected
- LED indicator
- Size 65(H) x 84(W) x 46(D)mm
- Colour beige
- Relay output
- 3 month guarantee

Cat. LA-5017

\$69.95

SAVE \$30 on 1988 PRICE



Terminator Pulse Count PIR

Terminator is a high quality pulse count passive infra red detector. (If you don't know what pulse count is, it is explained in the copy for LA-5019).

The terminator has the added advantage of being able to be mounted in a hall (with the optional Hall Lens Cat. LA-5020 \$3.95). As used by many alarm installers all around Australia.

FEATURES AND SPECIFICATIONS

- Dual element pyroelectric sensor
- 18 dual element zones in 3 layers
- Wide angle 90° multi layer coverage
- Coverage - 15 metre x 15 metre with optional lens - 30 metre x 30 metre
- Operation voltage 9 - 16V DC
- Tamper protection
- Pulse count switchable, normal or pulse count
- Pulse count time approximately 30 secs
- Size 120(H) x 62(W) x 42(D)mm
- Colour white
- LED indicator
- Sliding PC board for pattern adjustment

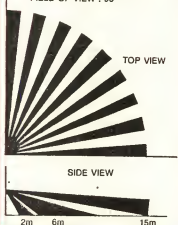
Cat. LA-5018

\$99

Hallway lens Cat. LA-5020 \$3.95



MAXIMUM COVERAGE : 15 x 15 m
FIELD OF VIEW : 90°



Night Security Sensor

This brilliant new product uses a built-in passive infra red (PIR) detector that reacts instantly to body heat, and activates a light when a person approaches your home. The light is automatically turned off when the person leaves. The sensor will switch up to 600 watts and when set will only operate at night. After triggered, the lights can be adjusted to remain on anywhere between 5 seconds and 10 minutes.

Features:

- Compact design
- Fully automatic
- Security - keeps intruders away
- Safety - no more groping in the dark
- Convenient - hands free operation
- Compatible with incandescent, fluorescent, quartz and halogen lighting
- Indoor/outdoor applications
- Suitable for entrances, porches, patios, stairways, garages, basements, hallways, closets, attics, storerooms, warehouses, workshops, etc.
- Can be operated in daylight or darkness

Specifications:

- Detection coverage - 12 mt long x 110° wide (fan shape)
- Detection zone - 38 beams
- Mounting height - 1.8 - 2 metres
- Power consumption - 3 watts maximum
- Lighting load - 600 watts max.
- Water resistant
- 240V AC operated

use existing lights

Cat. LA-5130

\$115



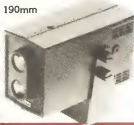
Infra Red Photo Electric Relay

This is the device which makes all the noise when you walk into a shop. Mounts on one side of the door, and the reflector (which is supplied) on the other. It will sound when someone breaks the beam, or can be switched so it sounds for 5 seconds and then resets. 240 volt operating. Will operate up to 15 metres. Built-in buzzer (extension buzzer can be added).

Size 90 x 143 x 190mm

Cat. LA-5120

\$139



Outdoor Infra Red Motion Detector

Ideal for both residential and commercial applications. Completely self contained and easy to install. Designed to mount directly to a standard round junction box.

The unit will automatically turn on two floodlights when someone walks within the detector range. Ideal security system to protect loved ones and property. Detection range is 40 feet long by 60 feet wide. Lights will stay on for a minimum of 10 seconds up to 15 minutes (adjustable). Works only at night. Globes not supplied but are standard portafloods available almost anywhere.

Cat. LA-5152

\$99.50



Dummy Camera Bargain

We all know that shoplifting and vandalism cost a small fortune every year. It has been demonstrated that television surveillance cameras in the right environment can discourage this activity.

This is where you come in.

We have made a great purchase of realistic looking dummy TV cameras. They are Australian made, are supplied with adjustable swivel mounting bracket, fixing screws, flashing LED circuit board and 2 flashing LEDs. Also supplied is the 2 x D cell nylon battery holder to power the flasher circuit. A fake cable wallplate is also supplied as well as a very conspicuous 210(W) x 160(H) self adhesive sign which says "THESE PREMISES ARE PROTECTED BY TIME-LAPSE ANTI-THEFT CAMERAS". The text of the sign is in orange-red fluorescent ink against a black background.

Cat. LC-5310

LIMITED QUANTITY

\$49.95 each

5 - 9 \$42.95 each

10+ \$39.95 each



Flashing Car Light

For those who couldn't be bothered with making up one of our Claytons burglar alarms. Pre-built, just connect black wire to negative, red wire to positive and yellow wire to accessory terminal on the fuse box and it works automatically when you turn the ignition switch off. You don't even have to remember to switch it on.

Supplied with huge round red bezel. Lens measures 18mm diameter. Complete with 2 alarm decals

Cat. LA-5080

\$17.95

Alarm Strobe Flash

Wire this in your house alarm to strobe when the alarm triggers. Gives visual warning as well as your usual available one. Operates on 12V DC drawing only 150mA. Blue in colour with screw mounting base. Flash rate about 120 per minute.

Cat. LA-5300

\$32.95



Alarm Stickers

SMALL

Durable self-adhesive sticker that clearly tells would-be-thief that there is an alarm fitted. Sticker does not refer to a specific alarm which creates further doubt. Sticks to inside of window

Cat. LA-5100

SIZE 72 x 32mm **95¢ each**

LARGE

For trucks, caravans, houses, offices and factories. Where a larger and more prominent deterrent sticker is required. Sticks to outside of window

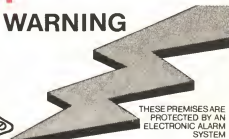
Cat. LA-5102

SIZE 5" x 3"

\$1.95 each



WARNING



THESE PREMISES ARE PROTECTED BY AN ELECTRONIC ALARM SYSTEM

Electronic Glass Shatter Detector

Ox-made unit that detects the noise made when glass breaks - NOT A SIMPLE ELECTRO-MECHANICAL DEVICE. The unit consists of a plastic case which contains an electret mic element coupled to an electronic filter/amp circuit. Adjustable sensitivity. When glass breaks the output connection goes logic 'low'. Easily connected to most car or house alarms.

Cat. LA-5065

NORMALLY ABOUT \$50

LIMITED QUANTITY

\$19.95

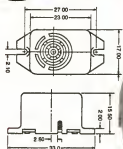
Mini Buzzer

This handy little solid state buzzer operates between 5-15VDC. Used in many, many kits.

Cat. AB-3452
\$2.75



10 or more \$2.50 each



Audio Transducer

This is an electro-acoustic transducer which contains no electronics and will transform AC voltages to sound pressure waves. It will also generate an AC voltage across its terminals when stimulated with a sound pressure wave.

Cat. AB-3440
\$2.75 10 or more
\$2.50 each



Piezo Buzzer

Similar to Sonalert. Earpiercing sound. Non inductive, operates from 5-15V DC. Ideal for almost all audio signalling applications.

Cat. AB-3456
\$7.95 10 or more
\$7.65 each



Pulse, Tone Buzzer

A buzzer having a clear, penetrating, intermittent tone or continuous. Size 40 x 28 x 20mm. Fixing centres 34mm. Voltage range 8 - 15V. Current 15mA. Output 80dB/1m.

Cat. AB-3453
\$3.50 10+ \$3.25 ea



116dB of 'Tweetie Pie'

This incredible little piezo screamer (measuring 57(L) x 33(H) - less bracket) emits a 116dB wail. It sounds like a very loud canary. The sound at close range is almost unbearable! If you mount it inside your car and your alarms fires, a would be thief would probably be scared out of his wits! Ideal for any compact high noise alarm application.

Cat. LA-5255

VIRTUALLY UNBEARABLE

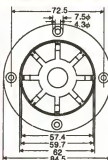
\$17.95 10+ \$16.95



Two Tone Piezo Siren

High efficiency two tone pulsating siren. Ideal for commercial/industrial use. 100dB SPL at 12V 200mA.

Cat. LA-5256
\$23.95 10+ \$22.95



Indoor Wall Mount Piezo

This high energy piezo siren gives a 102dB SPL two toned warbled sound. Ideal for alarms in homes and offices as it looks unobtrusive.

DC 6-15V @ 190mA. Size 105 x 105 x 45mm.

Cat. LA-5260

\$25.95



Large Screecher Siren

Unbelievable ear splitting sound. 120dB of it. Operates on 12 volts, draws 300mA. Ideal for burglar alarms where deafening sound is required and space is not a problem. Size 110(W) x 85(L) x 100(H)mm.

Cat. LA-5720
\$24.95



Piezo Reversing Buzzer

Extremely loud (115dB) piezo buzzer which is mounted on a metal angle bracket. Ideal as a reversing warning on vehicles or just an intermittent beeper. Draws 100mA. We tested this against the sonalert we used to sell at \$9.95 and found that this one is MUCH louder. Size 58mm diameter x 38mm deep plus bracket 50mm. These would normally be worth about \$18.

Cat. AB-3443

\$9.95



Horn Speaker

Fully weatherproof. New unique voice coil construction ensures high dependability on full drive. Suitable for PA, intercom, security systems, etc.

Cat. AS-3180
\$13.95

10+ \$12.95



Weatherproof Siren Horn

12V DC operated deafening siren

horn. Super handy for audio signalling, security systems, etc. Current drain 500mA. Completely weatherproof. Attractive off white PVC finish.

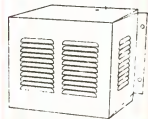
Cat. LA-5700
\$26.50



External Siren Cover

Louvered painted steel. Size for 5" horns or sirens. Special tamper switch on bracket. (Included).

Cat. AB-5110
\$23.50



High Power Buzzer

Solid state piezo buzzer with a loud, demanding tone. Size 60 x 39 x 28mm. Fixing centres 50mm. Voltage range 3V to 24V, current 15mA. Output 100dB/1m

Cat. AB-3454
\$4.95

10+
\$4.65 ea

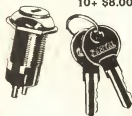


Keyswitch Standard Type

Solid barrel type, 19.5mm mounting hole, SPST action. Supplied with 2 (two) keys. Cat. SM-1030

\$8.50

10+ \$8.00

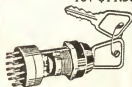


Barrel Keyswitch

For high security installations. 4 pole 2 position. Cat. SM-1033

\$11.95

10+ \$11.50



Barrel Keyswitch - Cam Lock

Made from die cast zinc. Used in alarms, petty cash boxes, etc. Cat. SM-1029

\$6.95



Alarm Tamper (Pin) Switch

Low cost spring loaded switch, simply make to frame (or earth) when pin is released i.e. by operating car or cabinet door, etc. 57mm overall, 12mm pin travel. Cat. LE-8775

\$1.65

10 or more \$1.50 each

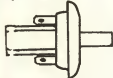


Alarm Tamper Switch

Switch mounts behind alarm module or bell or whatever you desire. If device is tampered with or pulled from the wall, the alarm will be triggered. SPST. Cat. LA-5066

\$2.60

10 up \$2.40 ea



Mercury Switch

Glass encapsulated 125V 3 amp AC SPST. Cat. SM-1035

\$2.25

10 or more \$2.05 each



Blank Alarm Key

Have you ever tried to get another alarm key? It's very difficult to find blanks that are suitable. We now have available the exact blanks. No more worries! Cat. SM-1034

\$1.20 each

Burglar Alarm Mat

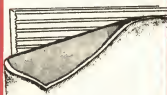
A "mat" of two plastic sheets welded around the outside to contain a SPST switch mechanism. When the mat is walked upon (or any part of the mat) a closed circuit results.

Between 8 and 10mm thick. It will safely fit under any carpet without shorting or being shorted.

SIZE 800 x 520mm

Cat. LA-5002

\$19.95



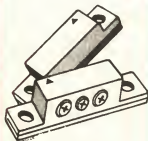
Reed Switch/-Magnet Assemblies

Normally Open (N.O.) and Normally Closed (N.C.) on the one assembly. Saves buying either one or the other. Powerful magnets, self adhesive or screw mount. Screw terminating.

* SELECTABLE NORMALLY CLOSED OR NORMALLY OPEN. Cat. LA-5070

\$4.75

10+ \$4.50 ea



Concealed Reed (N.C.) Switch & Magnet Set

Simply brilliant! Just drill a recess in your door or window and the magnet flush mounts to be "invisible".

The reed switch segment is similarly mounted into the door frame or window frame and wired into your system.

CAN'T BE TAMPERED WITH - PROFESSIONAL QUALITY Cat. LA-5075

\$4.99

10+ \$4.79



Window Tape

To protect windows. Simply stick in place and terminate with circuit blocks.

32 metres x 6.4mm wide

Cat. LA-5050

\$12.95



Circuit Blocks

To suit window tape LA-5050.

Self adhesive Cat. LA-5060 **\$1.25 ea**

10+ \$1.10 ea



Alarm Circuit Wire

Light figure 8 flex with trace, grey in colour. 14 x 0.14mm.

Conductors 2. Ideal for use with reed switches, sirens, IR detectors, etc. Cat. WB-1702

25¢ metre

\$19 per 100 metre roll

Car Bonnet Locking Device

This device will lock the Bowden Cable (i.e. the 'wire' that goes between the bonnet release handle and the bonnet catch) AUTOMATICALLY when you switch your car alarm on. The unit will give COMPLETE under-bonnet security! The locking device includes solenoid lock, control box, emergency Bowden cable release, screws, connector bracket and other hardware for universal fitting. Instructions supplied. Cat. LA-5400

\$19.95

LIMITED QUANTITY

12V DC 2 Amp Regulated Power Supply

Ideal for CB and workshop use where large amounts of power are required. DC connections via banana plug or screw terminals. Cat. MP-3017

\$69.95

OPEN AN ACCOUNT WITH JAYCAR

Jaycar is now accepting applications from all established companies who can exhibit good trade references.

For application details see our store managers or phone (02) 747 2022

Remote Control Accessories for Operation of Car Alarms, Door Locking, etc.

Jaycar has introduced a range of wireless remote control components and accessories. They are specifically designed for automobile (12V) application but are equally suitable for virtually any applications where remote control actuators/alarms are required.

AS 10S Wireless Receiver/Transmitter

This product consists of a receiver module and two key fob transmitters. A press of the button of the transmitter causes one of the two output wires on the receiver to go momentarily 'high' with respect to -12V. This facility is normally used to control the Cat. LR-8830 4 door power lock kit but is not confined to that application. It can be used to turn car alarms on and off, for example. Supplied with wiring instructions. Cat. LR-8820

\$99.50



4 Door Car Power Door Lock Kit

If you own a 4 door car and want the convenience of power door locking, this is the kit for you. It consists of 2 master solenoids and 2 remote solenoids. (Masters for the front doors, so opening either will unlock the other 3 doors).

Full wiring harness to connect all 4 solenoids to the doors of even the biggest cars, all hardware. Also included is the controller relay circuit (Cat. LR-8835 \$26.95) which also will adapt to our remote controller (Cat. LR-8820 \$99.50) so the system can be remote controlled. Cat. LR-8830

\$159.50



Ultrasonic Transducers for Vehicles

As used in many professional car burglar alarms. Consists of a separate transmitter and receiver which are covered by a rubber boot with a metal clip for easy mounting. Supplied with 2 metres of shielded cable. 12mm diameter, 40kHz frequency. Cat. ADI-3855

\$19.95 pair



DIRECT IMPORT

NEW FOR 89

Separate Door Lock Activators

If you own a two or three door vehicle you can purchase the separate components to have power door locking and remote control door locking.

Master Door Lock Actuator

This solenoid device is especially designed for after-market installation. It is made of durable materials (fibreglass reinforced body, acetal resin gears) with an operational life of 30,000 times. Requires 5A @ 12V. Will give 2.8kg thrust (max) over 23mm. Fitted with a 5A microswitch which can be used to power slave actuators. Supplied with comprehensive kit of hardware fittings to connect to door lock hardware. Dimensions 145(L) extended body x 28(W) x 62(D)mm. Cat. LR-8832

\$34.95



Slave Door Lock Actuator

Similar to above but no microswitch. Use for passenger door on 2 door car, if you only want drivers door to unlock other doors. Cat. LR-8833

\$32.95



Heavy Duty Actuator

Designed for opening boots, and rear doors etc. Complete with hardware. Cat. LR-8834

\$42.95



DIRECT IMPORT

NEW FOR 89

Power Lock Relay

To operate any of the solenoids you will need this relay. Suitable for key operation of door locks and remote control operation (with Cat. LR-8820 \$99.50). Cat. LR-8835

\$26.95



Ignition Kill Relay

Easily wired into your ignition to kill it, thereby foiling the thief and making the vehicle near impossible to steal. Rated at 30 amps. Cat. LR-8840

\$12.95



Fuel Cut-Off Solenoid

As reviewed in Silicon Chip July 1988

If you don't like the idea of fitting a burglar alarm, what about a fuel cut-off solenoid? Supplied with two threaded nipples, rubber fuel hose, hose clamps and a DPDT switch. In the energised condition the fuel is cut off. In cars with carburettors, the solenoid can be installed between the fuel pump and the filter. In diesel powered vehicles it should be before the pump.

There are a number of options for wiring in the solenoid. Add a KJ-7000 red light flasher kit (\$19.95) for total protection.

See diagrams for various ways of wiring in the solenoid.

Cat. XC-2050

\$69.95

NEW FOR 89



Fig. 1: This circuit activates a dashboard flasher when the fuel is cut off



Fig. 2: This circuit sounds a buzzer if you turn on the ignition but forget to also turn on the solenoid. A buzzer could also be added to the circuit shown in Fig. 1.



Fig. 3: By adding a diode and a capacitor, the buzzer now also sounds briefly when the ignition is switched off, to remind you to switch off the solenoid.



Adcola Soldering Station

Whilst Adcola equipment is very high quality, the fact that it is locally made is now a great benefit. The downward movement of the AS has made Adcola products very competitive - even against low cost Asian imports! We therefore strongly recommend that you seriously consider Adcola products - especially their temperature controlled soldering equipment before you buy inferior imported products.

THE HEART OF THE TEMPERATURE CONTROLLED SYSTEM

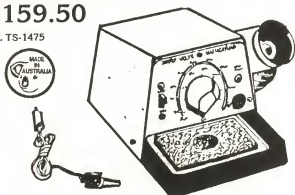
The unit will power either the CT-6, CT-7 or desoldering pencil. The E024 accurately monitors a temperature element wound in each of these irons. An electronic control circuit then meters power to the pencil in accordance with the temperature selected on the front panel of the E024. The temperature is continuously adjustable from 200 - 400 degrees centigrade (400 - 750 degrees fahrenheit), accurate to an amazing ± 5 degrees centigrade. Power is supplied to the pencils via a 'zero crossing' controller. This effectively means that power to the pencils is switched on and off only at the point on the AC power supply where the voltage passes through zero. By switching power in this sophisticated way spikes caused by commutated AC are avoided. (The major competitors electro-mechanical switch operates randomly at ANY POINT on the AC)

An extra special electrostatic shield is wound between the primary and secondary of the power transformer to virtually eliminate mains-borne spikes - no damage to MOS devices! To further reduce static voltage effect an optional auxiliary ground lead is provided to earth the equipment to be soldered to the same potential as the soldering equipment. In this way the effective tip EMF is limited to around 10 millivolts! This is far below the damage level for all MOS devices of course. We believe that the E024 unit has by far the best static control in its class! The E024 is supplied with generous mains cord, soldering guide, technical instructions (including internal schematic and parts list), soldering iron stand, tip cleaning sponge and ground lead. It is fused on the AC mains. It is guaranteed for 12 months.

BASE STATION ONLY

\$159.50

Cat. TS-1475



Soldering Irons to Suit

40 WATT

The CT-6 is a light-weight pencil with a very high capacity heating element for very low thermal inertia. It is supplied with a #20415 1.5mm tip as standard. Also supplied standard are: burn-proof silicone rubber cord, thermal shield and plug for connection to E024 controller unit.

Cat. TS-1478 **\$49.95**

80 WATT

The CT-7 is similar to the above unit but with 80 watt thermal capacity.

Cat. TS-1480 **\$55.00**



Spare tips for the Adcola CT-6, CT-7, S-30 & S-50
FOR CT-6 AND S-30 IRONS

#20407 0.7mm chisel point
#20415 1.5mm chisel (standard)
#20430 3mm chisel point
FOR CT-7 AND S-50 IRONS

#50407 0.7mm chisel point
#50425 2.5mm chisel point

Cat. TS-1484 \$5.95
Cat. TS-1485 \$5.95
Cat. TS-1486 \$5.95

Cat. TS-1488 \$6.95
Cat. TS-1489 \$6.95

Weller WTCPS Station

START WITH A GOOD SOLDERING IRON

One of the best soldering irons money can buy. The Weller WTCPS uses an advanced temperature control system based on the Curie temperature of a magnet built into the tip. To change temperatures, simply change the tip.

Low voltage transformer isolation means complete safety and the design ensures minimal leakage voltage at the tip - makes the iron perfectly safe to use with static sensitive IC's. Station comes complete with iron, tip, sponge and integral tip storage tray. The base houses the transformer, power switch and a stand for the iron.

The ultimate for the professional or serious hobbyist.

Cat. TS-1000

\$149.50

SPARE TIPS

Screwdriver 2mm tip double flat

Cat. TS-1352 PT6A - 315°

Cat. TS-1362 PT7A - 370°

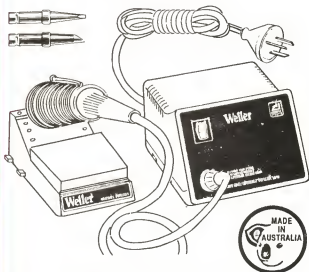
Cat. TS-1372 PT8A - 430°

Spade 3.2mm tip

Cat. TS-1360 PTC7 - 370°

Spare Weller sponge Cat. TS-1400 \$4.75

\$9.95 each



Portasol Portable Gas Soldering Iron

New generation soldering iron. Why bother with rechargeable batteries or chargers any more. The Portasol needs no cords or gas bottles. All you need is a can of Ronson type Butane cigarette lighter fuel. A full tank will last about an hour, and it refills in seconds.

Portasol has an adjustable dial. You can vary it from the equivalent of 10 to 60 watts.

SOLDERING IN THE FIELD

- No cords, batteries or bottles
- Heavy duty, tip temperature up to 400°C
- Adjustable temperature - equivalent to 10 - 60 watts
- Hard working, up to 60 minutes continuous use
- Refills in seconds, uses standard Butane gas lighter fuel
- No leakage current to sensitive circuits
- Made in Ireland

Cat. TS-1420

\$39.95

TIPS TO SUIT

- 1mm TIP Cat. TS-1421 \$15.95
- 2.4mm TIP Cat. TS-1422 \$15.95



Jaycar Soldering Iron

Ideal for the hobbyist and handyman. Our lowest price 240 volt quality iron has a stainless steel barrel. 30 watt.
Cat. TS-1450

\$16.95



Replacement Tip

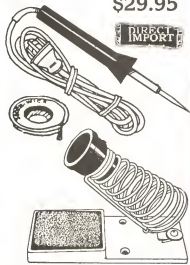
Instrument tip for Micron 30 watt, Arlec orange handle iron and Jaycar iron.
Cat. TS-1453

\$4.95

Jaycar Soldering Kit

Designed for general purpose soldering. This kit includes a 30 watt 240 volt soldering iron, a quality metal stand with sponge, a length of solder and a roll of solderwick.
Cat. TS-1650

\$29.95

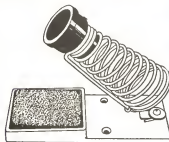


Soldering Iron Stand

Holds virtually any iron for convenient use. Includes tip wiping sponge.
Cat. TS-1500

\$10.95

SPARE SPONGE
Cat. TS-1501 95¢ each



25 Watt Iron

Ideal for the hobbyist and handyman. 240V operated with spare tips available. Lightweight. Tip temperature variation is well within limits suitable for electronic work. Complete with tip.
Cat. TS-1440

\$20.95

SPARE TIP
Standard chisel Cat. TS-1443 \$4.95



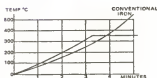
20 Watt Professional Iron

This great iron has all the features of those costing a lot more.

- 240 volt operating
- 370°C fixed temperature
- High efficiency patented heating element
- Iron clad chrome plated, long life interchangeable tips.

Cat. TS-1550

\$27.95



IRON CLAD TIPS

This soldering iron uses high grade iron clad, chrome plated and pre-tinned tips. Tip life expectancy is many times that of conventional plated tips.

- Cat. TS-1552 Micro chisel 1mm
- Cat. TS-1553 Mini chisel; 1.5mm
- Cat. TS-1554 Standard chisel 3mm

ALL TIPS \$6.50 each

Temperature Adjustable 240°C to 450°C

Excellent 240V iron, screwdriver temperature adjustable between 250 degrees C and 450 degrees C enabling very delicate soldering on low settings with surprising heat energy reserve on maximum setting. Relative temperature is indicated by LED lamp brightness. Much lower cost than a soldering station.
Cat. TS-1460

\$39.50



Battery Powered Cordless Soldering

"Toilet Duck"

This brilliantly designed product is a low cost alternative to gas-type portable irons. It is much safer to use for example on a boat or in other environments where LP gas or other inflammable fumes are present.

It is designed to operate with either low cost alkaline batteries (4 x 'C' cell) or 2 x 'C' NiCads which obviously would be a better proposition in the long run. It has a built in charger socket and LED indicator. Whilst the cost of 2 x 'C' NiCads and the unit approximate that of the gas pencil, you can at least recharge the unit anywhere.

Toilet Duck. Yes, we know it looks like a famous bathroom cleaner but it is a delight to use. The soldering iron tip retracts back into the body of the unit when not in use. The still-hot tip is then out of harm's way. The on-off switch is thumb convenient. The TS-1430 is supplied with one tip and one spare and a small quantity of solder.

Cat. TS-1430 **\$19.95**

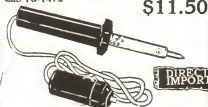
Extra tips Cat. TS-1432 \$4.95
Dimensions length O/A 210mm
30(W). Charger not supplied.



12 Volt - 15 Watt Economy Model

Ideal for light automotive use or field repairs. At this price an iron in your car, caravan or boat is cheap insurance against failed joints.
Cat. TS-1470

\$11.50



Adcola 240 Volt Irons

S-30

A high quality 12 watt non T.C. iron suitable for general hobby use. Idles at the correct temperature for PCB work. Tips will not seize in iron. Uses same tips as CT-6 pencil.

Cat. TS-1492
\$36.95

S-50

Similar to the above unit but with 16 watts thermal capacity. Uses same tips as CT-7 pencil.
Cat. TS-1494

\$39.95



Portasol Professional

The Portasol Professional is a fully comprehensive portable gas powered heat tool. It incorporates a soldering iron, hot knife, blowtorch and hot blow which is ideal for heatshrink tubing.

FEATURES

- No cords or batteries
- Heavy duty, tip temperature adjustable up to 400°C
- Equivalent to 10 - 60 watts
- 90 mins use on one fill of gas
- Uses standard butane gas lighter fuel
- Soldering iron is static free
- Blow torch operates up to 1300°C, perfect for heavy soldering jobs, brazing or silver soldering
- Hot blow is ideal for our heatshrink tubing, adjustable up to 500°C
- Hot knife cuts and cauterises synthetic materials such as plastics, ropes. Adjustable to 450°C

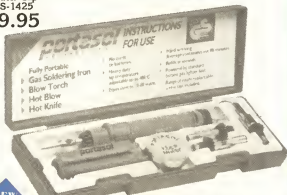
The complete kit comes in a compact and rugged polypropylene case (230 x 80 x 36mm) which contains:

1 x Portasol Professional heat tool with 2.4mm soldering tip

- 1 x Hot Blow tip
- 1 x Blow Torch tip
- 1 x Hot Knife tip
- 1 x Cleaning Sponge
- 1 x Safety Stand
- 1 x Igniter Cap

Cat. TS-1425

\$99.95



Replacement Tips
 1mm Tip Cat. TS-1426
 2.4mm Tip Cat. TS-1427
 Hot Blow Cat. TS-1428
 Blow Torch Cat. TS-1429
 ALL \$16.95 ea 10+ \$16.50 ea

Adel Nibbling Tool

Born in the USA

How things change. You can now purchase from Jaycar the original American Adel nibbling tool. Due to price rises from Asian countries we've been able to direct import the original tool (which we sold 10 years ago) and sell it at the same price as the Asian copy.

- Cuts holes - any shape over 7/16"
- Notches clearance for plugs and wiring
- Trims undersize holes to fit parts
- Suitable for steel up to 18 gauge, Aluminium 16 gauge, plastic and copper

Cat. TH-1765

\$29.95

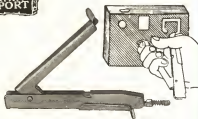
Replacement

Punch

Cat. TH-1766

\$21.50

Note: You can't replace the punch in the Asian model.



Electronic Anvil

Ideal for the hobbyist. Hammer that IC into that socket on our anvil. A must for your work bench. Length 180mm, height 80mm, weight 2.7kg. Cat. TD-2040

\$13.95



Supertool

- POLISHING • CUTTING
- ENGRAVING • DRILLING
- SANDING • GRINDING
- MILLING • ERASING, etc

The Supertool is a compact, precision power tool which has a multitude of uses in and around the home, the office, factory, workshop, etc. It is ideal for miniature and electronic engineering, educational projects and drawing office work. Particular emphasis has been placed on the design of the casing to ensure optimum balance and ease of handling, with weight kept to a minimum. The on/off switch provides a switch lock for continuous running. The robust 12 watt motor operates at 10,000 revolutions per minute via a 12 volt plug pack which is supplied. The unit is supplied with 8 tools, 6 eraser sticks and a collet chuck with five collets. Supplied in carry case. 2 year guarantee. Cat. TH-1900

\$75

SPECIFICATIONS

Operating Voltage	12V AC/DC
Operating Current	1 amp
Spindle Speed	10,000 rpm
Stall Torque	350gm/cm
Size (approx)	141 x 42 x 31mm
Weight	98 grams
Chuck Type	Collet
Power Supply	12V/240V plug pack adaptor



Miniature Plastic Vice

- Strong suction base allows easy portability
- Single action lever to secure or release suction
- Plastic jaws with rubber pads open out to 40mm
- Size (Approx) 85 x 65 x 60mm

Cat. TH-1848

\$6.50



Accessories for Supertool

POLISHING

3 steel wire polishing/cleaning brushes for use on metal.

\$17.95



DRILLING

4 high speed steel drill bits, 0.6, 0.8, 1 and 1.2mm for drilling holes in steel, non ferrous metals, wood and plastic.

Cat. TH-1904

\$8.50



GRINDING

3 grinding bits for smoothing, cleaning and polishing.

Cat. TH-1906

\$12.95



CUTTING

6 cutting/slitting discs with arbor for cutting, slicing, slotting, routing etc., in metal, plastics and ceramics

Cat. TH-1910

\$14.95



ENGRAVING

Diamond engraving bit for engraving glass, hard plastic and metals.

Cat. TH-1908

\$23.95

ENGRAVING

3 engraving/milling cutters for use on metals, plastics and ceramics.

Cat. TH-1912 **\$10.95**



Mini Bench Vice

Top quality mini vice.

Cat. TH-1850

\$11.95



30 Piece Engineer's Driver Set

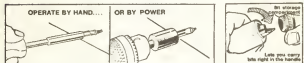
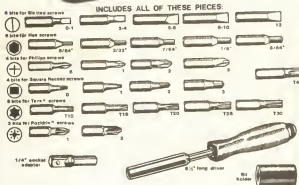
At last! A driver set incorporating those obscure shaped heads! Have you ever needed recently to service an electric tool? Chances are you would not have been able to do so because the screws holding the appliance together had strange shaped heads. Well now you can with our 30 piece driver set! This set contains all the driver bits you are EVER likely to encounter. (See below). Basic to the set is an 8 1/2" Chrome-Vanadium driver which will accept any of the 28 hardened steel bits supplied. They are held into the socket of the driver by a small magnet - so you can use the driver in any position. The screw together hollow handle will hold several tips so you don't have to take the whole set with you into the field. There is a tip here to suit almost any screw/nut you may come across.

Here's what you get:

- 5 slotted bits 0-1, 3-4, 5-6, 8-10, 12
- 5 hex bits 3/32", 5/64", 7/64", 1/8", 9/64"
- 4 Phillips bits No 0, 1, 2 & 3
- 4 square recess bits No 0, 1, 2 & 3
- 6 Torx bits T10, T20, T25, T30, T40
- 2 Pozidrive bits No 1 & 2
- 1 x 1/4" drive socket adaptor
- 1 x 1/4" drive hex bit holder

And it's all housed in a sealable tough plastic case.

Cat. TD-2000
\$19.95



Neon Test Screwdriver

A 3mm blade screwdriver with a built-in mains testing neon. Checks power points, extension leads, fuses, etc.

Cat. TH-2048

\$2.20



Desoldering Tool

As reviewed by Electronics Australia. This unit has many excellent features. Clear body to see when it's full, incredibly strong suction power. Made from high density polycarbonate plastic, one hand, easy to use operation and an automatic tip cleaner action. There's even a hole in it to hang on a hook. Supplied with Teflon tip. Replacement Tip Cat. TH-1822 \$4.75

Cat. TH-1820 **\$15.50**



Quality Jewellers Screwdriver Set

Quality easy to use colour coded screwdriver set with swivel plastic heads.

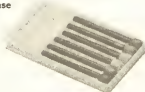
Screwdrivers include slotted 1.0, 1.6, 2.4, 3mm

Phillips No 0, 1

Supplied in transparent plastic case

Cat. TD-2005

\$5.95



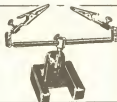
PC Board Holder

That extra pair of hands when you need them. Simple to adjust thumbscrews.

Two spring loaded alligator clips for gripping the board. Sturdy cast-iron base for stability.

Cat. TH-1982

\$12.75



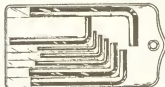
Allen Key Set

Set of 8 handy keys complete in plastic wallet.

Sizes: 1.5, 2, 2.5, 3, 4, 5, 5.5, 6mm

Cat. TH-1840

\$4.50



Alignment Tool Set

Set of 4 non-metallic tools for adjusting potcores, tuners, etc.

Cat. TH-1800

\$4.95



Screwdriver Aligner

200mm shaft

Cat. TH-1804

\$3.35



'Easy Etch' Engraver

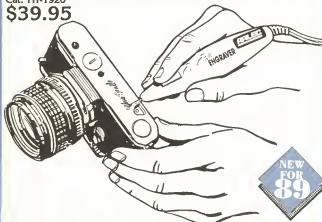
At least a low cost engraver. Ideal for permanently marking your valuables with owner identification. Also ideal for that everlasting message on gifts and trophies.

Features:

- Supplied with hardened steel engraving kit - will engrave virtually any surface • rotary motion of engraving kit eliminates vibrations • works at safe 12V (adapter supplied) • Diamond engraving bit available (Cat. TH-1908 \$23.95) or spare steel bit (Cat. TH-1912 \$10.95)

Cat. TH-1920

\$39.95



Powerful 6000 rpm Mini Drill

Tons of torque. Just the shot for PCB work. 12V DC operated from external power pack. (Not included). 1.2mm chuck capacity. Supplied complete with 1mm drill bit.

Cat. TD-2450

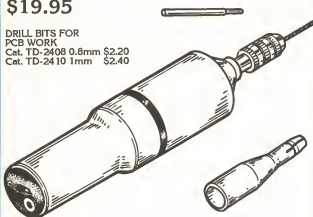
\$19.95

DRILL BITS FOR

PCB WORK

Cat. TD-2408 0.8mm \$2.20

Cat. TD-2410 1mm \$2.40



Wire Wrap Tool

Quality O.K. brand. Will wrap, unwrap and even strip the wire.

Designed for modified wrap.

Cat. TH-1830

\$29.95

Wire Size AWG	mm	Terminal Hole Diameter Inches mm	Terminal Hole Hole Depth Inches mm	Outside Diameter Inches mm
30	0.25	.036 0.91	1.50 38.1	.125 3.18



See Data section for information on wire wrap theory

IC Insertors & Extractors

Low Cost

Up until now these have cost a fortune!

FEATURES

- CMOS SAFE conductive plastic
- Exclusive bent pin alignment guide in handle, 8 to 40 pins
- Ground strap can be connected
- One hand operation

INSERTORS

CIT14168 to 16 pins
Cat. TH-1808

\$12.95

CIT1820 18 to 20 pins
Cat. TH-1810

\$13.95

CIT24-28 24 to 28 pins
Cat. TH-1814

\$14.95

CIT36-40 36 to 40 pins
Cat. TH-1816

\$15.50



PICK UP & ALIGN
BENT-OUT PINS



PREPARE TO INSERT



INSERT IC INTO SOCKET ALIGN BENT-IN PINS
OR PCB



EXTRACTOR

Deceptively simple looking device. One piece metal construction. 8 - 40 pins.

Cat. TH-1818

\$2.95



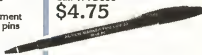
IMPORT

Dalo Pen

This looks like a normal felt tip pen but it isn't. You simply draw on a clean piece of blank copper clad PCB. The ink from the pen is etchant resistant so you have a quick and simple way of marking that PCB! The ink will wash off afterwards with meths, turps, etc. Includes spare tip.

Cat. TM-3000

\$4.75



Interlocking Parts Drawers

Unique side and top/bottom keying system allows you to use just a few or build a whole wall of drawers as your parts expansion dictates.

Quality designed drawer slides will not 'stick' or seize. Slide handle also takes identity cards. Single or double drawers available.

SINGLE DRAWER

Cat. HB-6300

DOUBLE DRAWER

Cat. HB-6301

\$5.50 ea

10+ \$5.10 each



"You can use Jaycar Mail Order Service from just about anywhere!"



'T-Rex'

Our wirestripper, nicknamed Tyranosaurus Rex, is far from extinct! It's a great way to strip all sorts of cable without damaging the conductors. It's also a price breakthrough.

- Automatically adjusts to insulation diameter
- One hand operation

Cat. TH-1824

\$12.95



Wire Stripper, Cutter & Pliers

High quality toughened wire stripper will strip wire sizes from 0.5mm to 6mm. Also includes a wire cutter and pliers. Made of alloy steel with hardness and industrial surface treatment and comfortable plastic grip handles. Length 150mm. Another Jaycar direct Import saves you money.

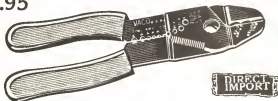
Cat. TH-1825
\$7.95



Deluxe Crimping Stripper Tool

Our crimping tool is suitable for a wide range of terminals, including ignition terminals. Tool also incorporates a wire cutter and stripper. Ideal general purpose tool for the glovebox.

Cat. TH-1828
\$6.95



Cutters - 120mm

Similar to TH-1890 except larger overall and with captive coil spring return. Vinyl handles.

Cat. TH-1891
\$9.95



Flush Cutters - 110mm

A more compact version of the TH-1891 cutter except with Japanned (black metal) finish and leaf spring return. Vinyl handles.

Cat. TH-1892
\$9.95



Stainless Steel Side Cutters -

High quality small side cutters that have thick (2mm) blades and comfort soft plastic handles which are spring loaded.

Cat. TH-1890
\$12.95



Stainless Steel Long Nose Pliers

The partner to our TH-1890 stainless steel cutters. These have half round smooth gripping jaws perfect for adjusting and bending components, picking up that dropped nut, etc. Comfort soft plastic handles which are spring loaded.

Cat. TH-1893
\$12.95



Pearl Catch

Incredibly handy tool for those moments when you need 4 hands. Will clip to and hold small nuts, bolts, washers, etc., for fixing in place.

Cat. TH-1842
\$4.95



Tweezers

Steel, pointed end tweezers. Useful tool for holding parts for soldering, holding small screws in position, etc.

Cat. TH-1750
\$1.95

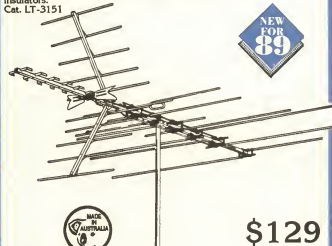


UHF/VHF Antennas

Super Ghostbuster

This brand new "top of the line" UHF/VHF TV antenna will really drag in those signals. Suitable for VHF 0 - 11 and UHF band 4 (SBS). Australian designed and manufactured. 3 year warranty on workmanship. Suitable for all Australian capital cities. High gain with reflector for fringe areas. Powdercoat boom with insulators.

Cat. LT-3151

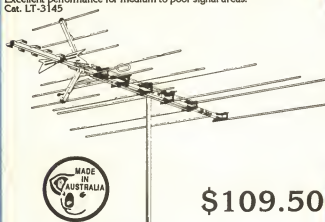


\$129

Triband

Suitable for most VHF and UHF applications Triband antenna for VHF channels 0 - 11, FM channels and UHF channels 21 - 69 band 4. Excellent performance for medium to poor signal areas.

Cat. LT-3145

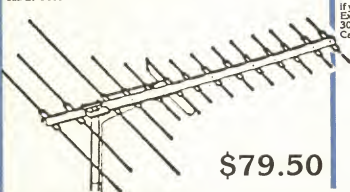


\$109.50

Metro

For those who want to receive VHF as well as UHF. This is the one you need. Suitable for metropolitan areas. Use LT-3026 balun for coaxial. Channels 0 - 11, including channel 28.

Cat. LT-3160

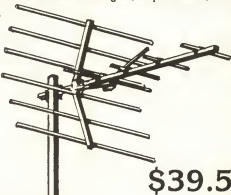


\$79.50

Band 4 and 5 UHF Antenna

If you need bands 4 and 5 you don't need to buy two aerials. Bands 4 and 5 on the one antenna, what a great idea. Ideal for Wollongong. FEATURES: Excellent gain -8dB, inbuilt balun, good directivity - front to back ratio 27dB. Gold anodised for long life, simple to install, European made.

Cat. LT-3178

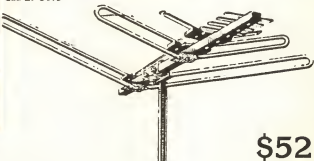


\$39.50

Gutter Grip

A combination aerial for good reception areas. UHF/VHF.

Cat. LT-3175

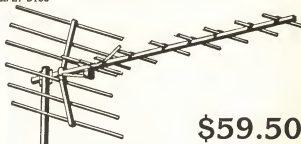


\$52

UHF

This UHF aerial is designed for Band 4 reception for all capital cities. Use with a diplexer to combine with VHF antenna. This antenna has ten elements and a reflector which picks up more signals and reflects them back to the aerial.

Cat. LT-3180

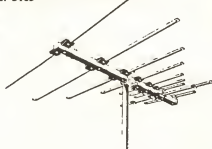


\$59.50

VHF Outdoor TV Antenna

If you don't need UHF this is the antenna for you. Excellent gain and directivity for areas with moderate signal strength. 300 ohms, use LT-3026 balun with coaxial.

Cat. LT-3165



\$62

Indoor TV Antenna UHF/VHF/FM

The ultimate indoor antenna - built-in mixer for UHF/VHF/FM - wide frequency band from 40MHz to 890MHz. Directional fine tuning possible with variable direction inner reflector - easy to mount - 75 ohm impedance with coaxial cable and plug.
Cat. LT-3130

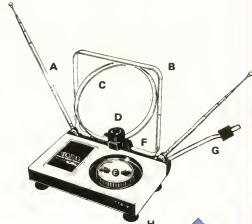
\$34.95



UHF/VHF/FM Indoor Antenna

Another special purchase by Jaycar to save you money.
• Rotating inner loop • VHF/UHF/FM reception • Built in UHF/VHF mixer • Slim line design • Can be wall mounted • Single 75 ohm cable and plug connection.
Cat. LT-3132

\$34.95



- A FM/VHF rod antenna
- B UHF outside loop element (fixed)
- C UHF inside loop element (45° rotating)
- D UHF inside loop direction tuner
- E Reception adjust tuner (12 position)
- F Element base with 5 position angle adjust
- G Output cable
- H Rubber feet (4 pcs)
- I Adaptor for wall hanging



Spiromatic Indoor

For prime reception areas, sits on top of your TV. Popular spiral design.
300 ohm cable supplied.
Cat. LT-3100

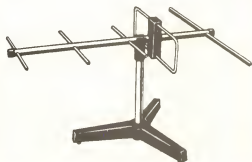
\$8.95



UHF Set-Top Antenna

Designed for those who for one reason or another cannot have a rooftop antenna. Top quality in performance and design for those in a good UHF signal area. Easy adjustment for horizontal or vertical polarisation. Complete with lead and plug. Covers both band 4 & 5.
Cat. LT-3140

\$24.95



Rabbit Ears

Two telescopic antenna mounted in a sturdy cabinet which sits on your TV set. Telescopic rods are adjustable for maximum efficiency.
Cat. LT-3110

\$23.50



FM Indoor Antenna

Simple ribbon type antenna (dipole) gives good performance in strong signal areas.
300 ohm termination.
Cat. LT-3002

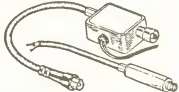
\$2.50



In-line Coaxial Amplifier

This great amplifier will reduce the loss from splitters and long cable runs. It can be used with a VCR or antenna. 10dB gain, 240V power supply included.
Cat. LT-3815

\$46.50



Baluns

Essential for matching 300 ohm antennas, TVs and ribbon with 75 ohm coaxial and TV connections

Outdoor

Mounts on TV antenna. Used to connect 75 ohm coax to TV aerial that does not already have a balun. Simple screw terminal connections. Waterproof, long lasting. Cat. LT-3026

\$3.75



Indoor Balun

Connects 75 ohm coaxial via screw connections to a 300 ohm TV or FM tuner. Short length of 300 ohm ribbon with spec'd lugs. Cat. LT-3027

\$2.95



Indoor Balun

Lets you connect 300 ohm ribbon to a 75 ohm TV set. Screw terminals for input, coaxial plug output. Cat. LT-3021

\$2.25



Indoor Balun

75 ohm socket for input and 300 ohm ribbon cable output. Also allows connection of TV games with plugs to a 300 ohm TV. Cat. LT-3022

\$2.25

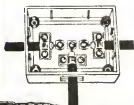


Splitters

Essential for operating more than one set from a single antenna - don't try wiring them without one - it doesn't work.

75 Ohm 2 Way

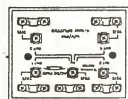
Screw connections
Cat. LT-3010



\$5.95

75 Ohm 4 Way

Screwconnections
Cat. LT-3012



\$9.50

High Quality Splitters

For those who want the best. High quality inductive splitters. If you need a splitter and you have long runs, or you are in a poor reception area you need a better quality splitter. Screw clamps for easy wiring.

SPECIFICATIONS:

	Insertion Loss	Side Loss
VHF UHF		VHF UHF
2 WAY	3.5 7	20 20
4 WAY	6.5 8	18 16

measured as dB loss
Cat. LT-3007

\$15.95

4 WAY Cat. LT-3008

\$18.95



TV & FM Splitter

This unit plugs into a 75 ohm wall socket and then either two TV's or one TV and an FM receiver can be plugged in. Cat. LT-3020

\$5.95



TV Game Computer Switch

Allows you to easily switch between two inputs to your TV. The input can be TV aerial, computer, video game or VCR. The output has a small length of coax and a 75 ohm standard plug. Input sockets are standard 75 ohm type. Grab one for when you will need it. Cat. LT-3018

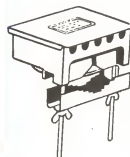
\$5.95



Outdoor UHF/VHF Diplexer

Mounts directly onto TV mast. Connect two aerial cables (UHF and VHF) to diplexer, then only run one cable down to TV. Cat. LT-3014

\$12.95



UHF/VHF Indoor Diplexer

This device allows you to connect 2 antennas (UHF and VHF) via screw connectors to the one socket on your TV. Output 75 ohms to TV. Cat. LT-3013

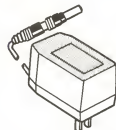
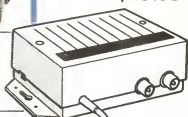
\$8.50



Indoor Antenna Amplifier/ Splitter

This UHF/VHF and FM amplifier incorporates a 2 way splitter and covers all Australian frequencies. 2 x 6dB gain. Power supply supplied to run from 240V AC. Cat. LT-3810

\$49.95



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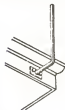
CALL GARY
JOHNSTON OR
BRUCE ROUTLEY
NOW ON
(02) 747 2022

Antenna Mounts

Bargeboard Mount

Simply bolts onto bargeboard (below gutter) or other support. 1390mm long, galvanised steel construction.
Cat. LT-3200

\$11.95

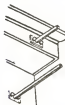


Wall Mounts

Two lengths bolt onto wall and space antenna to clear eaves. (Use with LT-3230 mast section. Galvanised steel, including U-bolts. 28cm (11"))

Cat. LT-3210 **\$7.25**

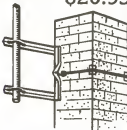
69cm (27") **\$10.95**



Chimney Mount

Steel straps wrap around the chimney to securely support mast section (Use LT-3230, not supplied).
Cat. LT-3225

\$20.95



Gutter Mount Bracket

A handy small bracket to mount a TV aerial on a gutter plus 10 metres of 300 ohm cable.
Cat. LT-3194

\$12.50

Mast Section

2.4 metres long galvanised steel mast.

Cat. LT-3230
\$10.95

U-Clamp/V-Block

For securely clamping mast sections, mounts, etc., at right angles.

Cat. LT-3235

\$2.50 ea

10 or more \$2.25 each



UHF-VHF Band Separator

If your TV has both a UHF and VHF input socket on the back and you have a UHF/VHF combined antenna, you will need one of these.

The LT-3016 will separate the UHF and VHF signals and direct them into the correct socket on your TV.
Cat. LT-3016

\$5.95



TV Wall Sockets

Designed to match modern electrical fittings - white in colour. SINGLE

Cat. LT-3023

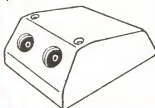
\$3.75



DOUBLE

Cat. LT-3024

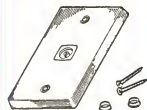
\$4.95



Flushmount Wall Socket

Cable from aerial can be run to this outlet, then continued on to another one. Standard power point size.
Cat. LT-3025

\$6.95

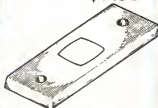


Mini Wall Plate

Standard white mini wall plate with a cutout for either a 75 ohm snap-in insert or 300 ohm.

Cat. LT-3030

\$1.95



300 Ohm Insert

Cat. LT-3032

\$2.20



75 Ohm Insert

Cat. LT-3031

\$2.65



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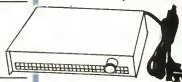
UHF to VHF Tuneable Down Converter

Enables you to watch UHF channel 28 SBS on a VHF only TV.

Tuneable UHF bands 4 and 5 to VHF channel 1. Has built-in amplifier to ensure that there is no signal loss. Power supply included.

Cat. LT-3830

\$99.95



Fly Leads

Leads to connect between TV and wall socket, TV and video. Terminated with standard 75 ohm plug or socket as used on TV's.

PLUG TO PLUG 1.8m

Cat. AV-6580 **\$3.50**

PLUG TO SOCKET 1.8m

Cat. AV-6582 **\$3.75**

PLUG TO PLUG 4.5m

Cat. AV-6584 **\$6.95**

PLUG TO SOCKET 4.5m

Cat. AV-6585 **\$6.95**

PLUG TO PLUG 10m

Cat. AV-6586 **\$11.95**

PLUG TO SOCKET 10m

Cat. AV-6587 **\$11.95**



OPEN AN ACCOUNT WITH JAYCAR

Jaycar is now accepting account applications from all established companies who can exhibit good trade references.

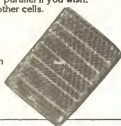
For application details see our store managers or phone (02) 747 2022

Jaycar proudly introduce a range of Solar operated products. These allow you to harness the power of the sun - free.

0.45 Volt Solar Cell Modules

Ideal for experimenters. Connect in series or parallel if you wish. Terminal strap enables easy connection to other cells.
TWO HANDY SIZES

0.45V	0.45V
400mA	1000mA
Size 75 x 45 x 6mm	Size 96 x 65 x 6mm
Cat. ZM-9005	Cat. ZM-9006
\$3.95	\$6.50
10+ \$3.75 ea	10+ \$6.20 ea

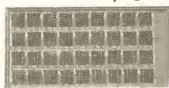


Solar Panels

- 2 MODELS
6 volts @ 240mA
12 volts @ 120mA

These are quality made solar panels with aluminium picture framing around the edges for durability and ease of mounting. The solar cells themselves are covered by a clear resin for long life. Each panel measures 327(L) x 165(W) x 18mm thick.

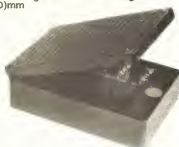
6 volt panel @ 240mA	12 volt panel @ 120mA
Cat. ZM-9008	Cat. ZM-9009
\$79	\$79



Solar Battery Charger

The solar panel in the lid will charge up to 4 x AA NiCads in a fairly short time. It is ideal for yachts, campers or anywhere where 240V is not available. It is NO DEARER than an ORDINARY NiCad charger but takes about the same time to charge in reasonable sunlight.
Size 65(W) x 30(H) x 95(D)mm
Cat. MB-3502

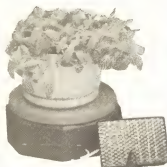
\$14.95



Solar Plant Turntable

No more lopsided plants. Promote healthier well developed plants. Will handle up to 15kg of weight. Also ideal for store window displays.
Cat. YX-2503

\$17.95



Solar Car-Battery Booster

How often have you been away on holiday leaving your car at home, and when you return you find your battery as flat as a tack! You need to push the car out of the garage, down the driveway and out onto the street so you can connect jumper leads, or wait an hour or more for the NRMA/RACQ/RACV to arrive.

Well, with this handy gadget all that is gone. When you park your car for extended periods (i.e. 4 or more days) simply plug this into your cigarette lighter socket and sit the unit on the dash board, or near the window of the garage. When you return home - no more dead batteries. The unit consists of solar cells in a housing with 1 metre of cable and cigarette lighter plug.
Cat. MB-3503

\$29.95



Solar Education Kit

Now you can experiment with solar energy - the energy source of the future. Our solar education kit is designed to let you build your own solar models. This kit comes complete with:

- Solar cell module
- Solar energy booklet explaining the whys and hows of solar energy
- Small DC motor
- Screws and nuts
- Wire with motor clips
- Coloured spinner discs
- Paper aeroplane and bird models
- Plastic turntables with 4 sizes, 5/8", 1", 1 1/2", and 2"
- Plastic fan-spinner

Cat. KJ-6690

\$9.95

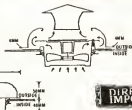


Solar Powered Exhaust Ventilator

The Sunvent is a high capacity solar cell and DC motor powered fan in a well designed cowling. The cowling has been cleverly designed to keep water out and back draughts out. Simply cut a 120mm hole in a bulkhead or deck - or whatever - and the Sunvent will remove stale damp air and cut down mildew growth. It will extract dangerous LP gas or petrol fumes safely as the motor is sealed. The Sunvent is at its best in bright sunlight but will work quite well even on bright cloudy days. It will move about 35 cubic metres of air every half hour in good conditions. Supplied with cover to turn off cells and stop all airflow.

- Boats
- Caravans
- Port-a-Loo's
- Greenhouses
- Sheds
- Holiday homes
- Backyard dunnies
- Kitchens
- Weekenders etc

Cat. YX-2500



LESS THAN HALF
THE PRICE OF
NEAREST
EUROPEAN MADE
EQUIVALENT

\$44.95

Cordless Telephone

New 1989 Model - 300m range!

Built to the new 30/39MHz Telecom Authorised frequency band, this unit is a winner for range. Apart from that, the 660 AUS has great unique features:

- Desk/wall mountable
- Last number redial up to 32 digits
- Tone/pulse switchable
- Full 2-way intercom
- User selectable security code
- Automatic return to standby mode when handset is on charge
- 12 months warranty

COMPLETE WITH POWER SUPPLY SENSATIONAL VALUE

Telecom Australia
Authorisation Number
C86/35/210
Cat. YT-7065

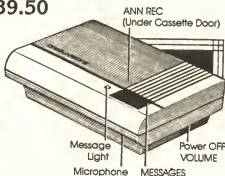
\$179



Low Cost Telephone Answering Machine

This machine is super simple to use! Only one button and the on/off switch controls the unit. All other functions are automatic. At this price you can afford one at home, at work (may not operate on some PABX systems) - even in your car!

Cat. YT-7020 **\$139.50**



Automatic Telephone Diverter

NEW MODEL FOR 1989

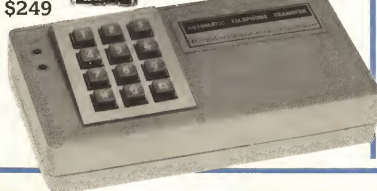
This device will divert an incoming call to, say, an unattended office, surgery or home, to another location. (Two exchange lines are required). The unit will divert EITHER of the incoming lines.

The YT-6510 can be switched to limit incoming calls to 3 minutes or no time limit conversation. The unit will automatically cut out, however, if no conversation persists for 40 seconds. This can save money.

Supplied with 240V plug adaptor, instructions and telephone leads. Double adaptor Cat. YT-6020 \$4.95 may be required. Measures 190(W) x 110(D) x 35(H)mm.

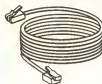
Cat. YT-6510

\$249



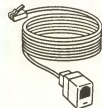
US Type Leads/Connectors Extension Cable

US plug to US plug. Length 5 metres.
Cat. YT-6040 **\$8.95**



Extension Cable

US plug to US socket. Length 5 metres.
Cat. YT-6046 **\$9.95**



Extension Cable

Australian socket to US plug. Length 5 metres.
Cat. YT-6044 **\$12.95**



Line Cable

US plug one end to bare wires. Ideal for any application and solves crimping cable to US plug which is very difficult without special crimper. Length 2.5 metres.
Cat. YT-6042 **\$4.95**



Double Adaptor

To connect two telephones to the one socket.
Cat. YT-6056 **\$6.95**



Curly Cord

US plug to US plug. Replace-ment handset cord. Length 4.5 metres.
Cat. YT-6048 **\$12.95**



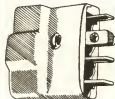
Wall Socket

Standard US type wall socket.
Cat. YT-6058 **\$4.95**



Plug Adaptor

Australian plug to US socket.
Cat. YT-6054 **\$6.50**



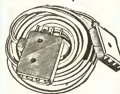
Extension Cords

5 metre

4 wire, suitable for PABX and commander systems.
Cat. YT-6010 **\$10.95**

15 metre

2 wire. Suits all standard telephones.
Cat. YT-6015 **\$15.95**



Socket Double Adaptor

Cat. YT-6020 **\$4.95**



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International Transistor Selector

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Over 27,000 (YES, TWENTY SEVEN THOUSAND) American, British, European & Japanese transistors listed with comprehensive electrical, mechanical specifications, lead connections diagrams, manufacturers names and recommended substitutes! This amazing 380 page book is an ABSOLUTE MUST for the serious enthusiast, TV serviceman or lab.
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 - Voltage comparators
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 - D to A converters
 - Sample and hold
 - Temperature sensors
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 - Surface mount
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National CMOS Logic Databook

Once again we have stocks of this fabulous databook.

Components covered in the book include:

- 74HCQQ series
 - 4000 series
 - 74C00 series
- CMOS application notes and surface mount diagrams.
Approx. 1450 pages.
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IC Substitution Manual

This book is as good as they come. Lists all of the current ICs from 108 of the western worlds IC manufacturers. National Semiconductor lists 19 pages, (4 cols/page) of their products. Motorola 19 pages, RCA 9 pages and Texas 18 pages. Many obscure (to Australia) manufacturers are listed. And that's only half the book! The other half of the book lists the generic number of the IC. 358 pages, 190(W) x 262(H)mm
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784+ pages of transistor equivalents in strict algebraic numeric order. Each device is briefly described by its prime maker, material, polarity, case type and lead configuration, function and whether a complementary version exists. Equivalent parts listed.
790 pages, 110(W) x 145(H)mm
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Popular data manual. At last readily available. Includes data design procedures and equivalent listings for 1000's of devices under headings Op amps, voltage regulators, consumer circuits (e.g. TV, automotive power), high frequency circuits and special purpose circuits. Gives data, design procedures and equivalent listings for memory/microprocessors support line drivers/receivers, telephone comparators, voltage reference and data conversion devices. Includes comprehensive selector guide.
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By Walter G Jung
Earlier editions of IC Op-Amp Cookbook have been considered a 'classic' in the industry. The new edition has been greatly expanded in terms of device coverage in keeping with state-of-the-art advancements. Numerous charts make selecting data on a particular device much easier. Applications are discussed both in terms of their range and scope, and in terms of the appropriate applicable devices reflecting the latest technology. 608 pages, 140 x 216mm, softcover.
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Hobbyists will have fun and save money by constructing the more than 100 projects and circuits, covering linear and digital devices, timers, and general devices. Each chapter is project-oriented using a casebook approach, which spells out all the steps needed to design projects of a similar nature. The variety of project ranges from linear ICs to CMOS and is designed to interest electronics, computer, and amateur radio hobbyists. All required devices are readily available. 256 pages, 140 x 216mm, softcover.
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Transistor Biasing

By Ian Ridpath
This is basically a set of notes that deals with DC biasing of bipolar and Mosfet transistors. Both bias design and analyses of such circuits is covered. It assumes that the reader is technically familiar with the characteristics of the devices discussed. This book would be a must for anyone who was contemplating amplifier design, etc. 40 pages, 245 x 175mm, softcover.
Cat. BR-1130
\$4.95

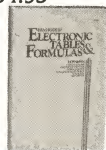
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An excellent introduction to the theory, design and implementation of phase locked loop circuits using various TTL and CMOS devices. Useful self study course for the experimenter and for inclusion in college courses on control systems & linear IC's. Includes manufacturers data sheets and describes the use of breadboarding aids in the wide range of laboratory type experiments. 256 pages, size 140 x 216, softbound.
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Understanding Digital Logic Circuits

Designed for the service technician engaged in radio, television or audio troubleshooting and repair, this book painlessly expands the technicians expertise into digital electronics.

Beginning with digital logic diagrams, the reader is introduced to basic adders and subtractors, flip-flops, registers and encoders and decoders. Memory types are also discussed in detail. 392 pages, size 140 x 216, softbound.
Cat. BS-0400
\$34.95



Understanding Data Communications (2nd Edition)

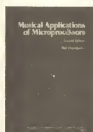
Data communications - using digital signals to communicate information - is the lifeblood of today's economy. Its pervasive impact can be felt everywhere, from newspaper copy transmitted by satellite and printed at remote locations to intercontinental communications used for international business. Understand the codes used for data communications, the types of messages, and the transmission channels - including fibre optics and satellites. Learn how asynchronous modems work and how they interface to the terminal equipment. Find out about protocols, error control, local area and packet networks. 272 pages, 178 x 229, softbound.
Cat. BS-0455
\$27.95

Musical Applications of Microprocessors, Second Edition

By Hal Chamberlin
This expanded and revised edition covers analog, digital and microprocessor sound and music synthesis. Its nonmathematical language makes the material accessible to musicians and computer users, as well as engineers.

New synthesis techniques, nonlinear waveshaping, Vostin, and the Fourier transform are covered and supported with program listings in BASIC and 68000 assembly language. 816 pages, 159 x 235mm. Hardbound. Cat. BS-0490

\$49.95



Practical MIDI Handbook

By R.A. Penfold
The Musical Instrument Digital Interface (MIDI) is a subject that many people have heard of but know little about. Many electronics magazines produce MIDI type electronic projects and these are proving to be reasonably popular - especially in the U.K. This book is primarily aimed at the musician who has some technical knowledge of electronics. It explains what MIDI is, what MIDI's vast capabilities are, how to interconnect, etc.

Special emphasis is placed on MIDI and computers and operating a MIDI connected system.

An excellent book. 150 pages, 215 x 140mm. Softcover.

Cat. BP-1202

\$17.95



Practical Power Control Techniques

By Irving M. Gottlieb
Motors, switches, dimmers, battery chargers, and amplifiers - just a sampling of the everyday products that rely on power-control devices.

Written in an easy-to-read, tutorial format, Practical Power Control Techniques is the first single source available to skillfully guide the practical engineer, technician, or hobbyist through the rapidly changing, high-tech area of power control technology. 256 pages, 140 x 216mm. Softcover.

Cat. BS-0528

\$19.95



Better Radio/TV Reception

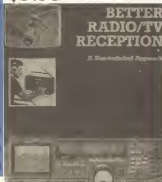
This book describes a simplified approach to improving one's radio or TV reception by gaining an understanding of the principles. Technical concepts have been presented in plain language. Whilst most readers on this subject have confined themselves to short wave reception, this book covers all broadcasting bands, including TV. This book aims to plug the gap between the textbooks and the leaflet that came with your TV or radio. This is the FIRST such book published in Australia according to Radio Australia.

Contents:

- Chap.1 Radio/TV reception - overview
- Chap.2 The broadcasting bands
- Chap.3 Receivers
- Chap.4 Antennas
- Chap.5 Advanced topics
- Chap.6 The broadcasters
- Chap.7 The hobby of radio DXing

Cat. BA-1150

\$9.95



Easy-Up Antennas for Radio Listeners and Hams

By Edward M. Noll
Any radio listener or licensed ham radio operator - whether novice, technician, or new, general, or advanced licensee - will want to read this book to learn how to do some low-cost 'homebrewing'. Moving from basic construction techniques and testing to outdoor, indoor, mobile, built-in, and loop antennas, the book covers the very latest antenna designs and construction practices.

Topics covered include:

- Radio services
- Basic antennas and their construction
- Antenna tests and comparisons
- Vertical variations
- Dipole and longwire variations
- Directional longwire and beam antennas
- Special HF antennas
- Medium and longwave antennas
- Confined space and indoor antennas
- VHF/UHF antennas
- International antenna dimension tables for radio listeners
- Fundamentals and tests
- Antennas for the novice operator
- Antennas for general and advanced licenses
- Antennas for the new technician and new VHF/UHF operator
- International antenna dimension tables for ham radio operators

224 pages, 216 x 280mm. Softcover.

Cat. BS-0735

\$24.95



How to Programme and Interface the 6800

Popular author Andrew Stauegard gives you a complete introduction to microprocessor programming and interfacing techniques with specific reference to the powerful and highly popular Motorola 6800 series. Information flows smoothly from introductory microcomputer considerations through internal architecture, programming techniques and system interfacing. Included are over 30 practical experiments which you can perform on any 6800 based microcomputer. A perfect learning aid for computer and electronics students. 416 pages, 140 x 216, softbound. Cat. BS-0582

\$27.95



Shortwave Radio Listening with the Experts

Editor - Gerry L. Dexter
Experts in shortwave listening share their expertise to make this single-volume treasure complete. Its 25 chapters cover everything needed to get the most value from both the simplest and the most sophisticated receiver. Because even the more experienced listeners are not equally strong in all facets of band specialities, this book can be used by the beginner as well as the established listener.

- Topics covered include:
- Setting up your shack
 - Antennas for shortwave reception
 - Purchasing the right shortwave receiver
 - Fundamentals of shortwave radio propagation
 - Recognising languages
 - Printed materials for the DX'er
 - Tape recording and shortwave
 - The verification game
 - Computers and DX'ing
 - Over-the-horizon radar
 - An overview of the numbers stations mystery
 - Challenge and changes in medium-wave listening
 - FM DX'ing
 - Exploring the VHF/UHF action bands
 - Utility monitoring
 - World radioteletype press stations
 - Amateur and DX'ing

The 25 contributors are known by the shortwave community for their area of expertise. 528 pages, 190 x 248mm. Softcover.

Cat. BS-0480

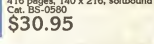
\$29.95



Programming and Interfacing the 6502 with Experiments

Excellent starting point for 6502 based micro-computer novices and veterans alike who may not have much assembly language and programming or chip level interfacing experience. Includes experiments and examples of simple I/O techniques, instructions and chip level interfacing that can be reinforced with a low cost KIM, SYM or AIM system. Helps you understand all 6502 based computer systems. 416 pages, 140 x 216, softbound. Cat. BS-0580

\$30.95



Basic Circuits

Featuring more than 300 worked examples and 900 practice problems. **Electric Circuits** is written for electrical/electronic students in colleges and technical institutes. The text covers electricity and the structure of matter, basic and complex circuits and vectors, DC and AC measurements, complex networks, and much more. Practice problems include schematic diagrams and emphasising alternate solutions. Topics covered include:

- Electricity and the Structure of Matter • Ohm's Law and Electrical units • Resistance and Conductance • Energy and Power • Simple Series Circuits • Simple Parallel Circuits • Complex Networks and Kirchhoff's Laws • DC Network Theorems • Capacitance and Capacitors • Magnetism and Electromagnetism • Inductance and Inductors • Sources of Electromotive Force • DC Electrical Measurements • Sine-Wave Forms • Complex Algebra and Electric Vectors • Basic AC Circuits • AC Network Theorems and Bridge Circuits • Power in AC Circuits • Resonance • Simple Linear Circuits and Nonlinear Voltages • Polyphase Circuits • Transformers • AC Electrical Measurements • Appendices include: Values of Exponential Functions, Units, and Mathematics. Hard cover - 888 pages. Size 260 x 180mm. Cat. BH-0904

\$69.50



Electric Circuits

A. Richard Johnson



Electronic Telephone Projects

Helps the hobbyist or electronics experimenter with 15 fun-to-build projects, including Soft Tone (replaces the harsh bell sound) and Babysitter (permits you to dial your home from anywhere to monitor home activities). Provides numerous illustrations on construction, testing and hookup. 168 pages, 140 x 216, softbound. Cat. BS-0614

\$18.95

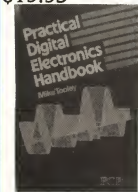


Practical Digital Electronics Handbook



By Mike Tooley
The vast majority of modern electronic systems rely heavily on the application of digital electronics. This book aims to provide readers with a practical introduction to the subject. Anyone involved with the design, manufacture or servicing of digital equipment should find this book invaluable. Anyone just interested in the subject will find it rewarding. The book introduces basic digital concepts and covers such areas as logic gates, bistables, timers, etc. It quickly moves on to microprocessors, support devices and input/output (I/O) devices. The popular RS232C interface is discussed in detail as well as the general purpose instrument bus IEEE-488 and finally IEEE-1000 based microprocessor bus. Test gear projects are also shown for the reader to construct. An excellent book on the subject. 198 pages - 215 x 140mm. Cat. BP-1204

\$19.95



Regulated Power Supplies (3rd Edition)

The newest, most comprehensive discussion of internal architecture and operation of the latest solid-state regulators. Thoroughly explains when regulated supplies are needed and how to incorporate them into your design projects. Discusses modern, practical circuitry including linear and switching circuits and late ICs. A valuable asset for any technician or engineer involved in servicing or design. 424 pages, 140 x 216, softbound. Cat. BS-0526

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Introduces BASIC programming in a minimum of time and effort. Shows how to write useful programs and what computers can do. For new computer owners, students, and those involved with computers at work.

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8080 & 8085

Full instruction set, ASCII, hex and decimal conversions, flags, cycle times, interrupt structure, pinout, disassembly table, program example, code for comparisons, reg map, diagrams, and more.

Cat. BM-8501

6502 (65XX)

Full instruction set, ASCII, hex and decimal conversions, flags, cycle times, interrupt structure, pinout, disassembly table, memory and reg maps, code for comparisons, addressing, notes and more.

Cat. BM-8502

Z80 CPU

Full instruction set, ASCII, hex and decimal conversions, flags, cycle times, interrupt structures, pinout, disassembly table, reg map, addressing, code for comparisons, powers of 2, diagrams and more.

Cat. BM-8500

8086 & 8088

Full instruction set, ASCII, hex and decimal conversions, flags, cycle times, interrupt structure, pinout, disassembly table, key memory locations, reg map, and cautionary notes. No binary codes to translate.

Cat. BM-8508

WORDSTAR

Much more info than keyboard overlays and can be flipped over faster. Allows large text window and avoids sub menu hopping. For beginners and advanced users. Covers full manual and more.

Cat. BM-8506

7400 PINOUTS

Part number, family type, descriptions and pinouts in new compact tabular format. Virtually all parts are covered. Avoids missing data sheets and not knowing about chips from other manufacturers. (Use for 74C, LS, HC etc. as well.)

Cat. BM-8503

MC68000 CPU

Once again a very thorough description of the workings of the 68000 type CPU. The full instruction set is described as well as flags, cycle times, registers, pinout connections etc.

Cat. BM-8516



Loudspeaker P.A. Bin Enclosure Designs Book

Fane Acoustics U.K. makers of speakers for the likes of Pink Floyd, David Bowie, Genesis, Iron Maiden, etc., have produced an absolutely fantastic book on P.A. bin designs. The book begins with construction info in general, i.e. what materials to use, how to join timber, how to brace the cabinets, sealing, lining, wiring, crossovers, impedance matching, etc. The second section includes 22 separate detailed designs for: reflex cabinets, horns, wedge monitors, folded horns, w bins, etc. Designs accommodate 12", 15" and 18" speaker components.

This book is crammed with information. Save a fortune and build high power P.A. bins for yourself and friends.

Cat. BF-4150
\$14.95



How to Build Speaker Enclosures

This book covers infinite baffle, bass reflex and horn (folded) type enclosures. It explains crossover networks and shows how to work out component values of such networks.

Detail plans of many enclosures are included in this book as well as explanation of terms and testing techniques.

144 pages - 8 chapters, extensive index Cover dimensions 220 x 140mm
Cat. BS-0729

\$14.95



Magazine Binder

IMPROVED - WIDER

Our new binder has a wider spine with a wider magazine retaining fitting inside. This fitting has another great feature too. It doesn't have those slots to hold the wire. It has HOLES. This gives you a greater flexibility when mounting a skinny magazine issue against a fat one. Extra holes are punched in (16 in all) Only 12 wires are provided however. Smart royal blue covers. Cat. BB-7000

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10 up \$7.50 each

- and guess what? We are proud to say that they are made in Australia, whereas they were imported before.



Computer Aided Logic Design

An excellent reference for electronics engineers who use computers to develop and verify the operation of electronic designs. The author uses practical, everyday examples such as burglar alarms and traffic light controllers to explain both the theory and the technique of electronic design. CAD topics include common types of logic gates, logic minimization, sequential logic, counters, self-timed systems, and tri-state logic applications. Packed with practical information, this is a valuable source book for the growing CAD field.

448 pages, size 190 x 248, softbound

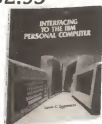
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Interfacing to the IBM Personal Computer

The IBM PC's open architecture lends itself to external device interfacing. Learn from the lead designer and architect of the IBM PC how to exploit this capability. Includes design tips and examples, many subroutines for interfacing, and BASIC programs to explain inter-facing functions. 272 pages, size 203 x 235, softbound
Cat. BS-0408
\$32.95



Macintosh Programming Techniques

Intermediate and advanced programmers will learn to get the most out of the powerful, versatile Microsoft BASIC 2.0 with this excellent tutorial. The author's easy-to-understand programs and helpful illustrations demonstrate Macintosh techniques such as windowing, custom dialog boxes, accessing utilities in the Macintosh ROM tool kit, pull-down menus, powerful graphics, and using the mouse.

400 pages, size 190 x 248, softbound

Cat. BS-0416 **\$29.95**



Video Cameras Theory & Servicing

You can't fix it unless you know how it works. This entry-level technical primer on video camera servicing gives a clear, well illustrated presentation of practical theory. From the image tube through the electronics to final interface, all concepts are fully discussed. The final section on troubleshooting lets you put your new found knowledge to work for profit.

264 pages, size 216 x 280, softbound

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Best Book of Lotus 1-2-3 (2nd Edition)

This tutorial book steps readers through the various functions of the program and shows them how to use Version 2.0 in today's business environment. Each chapter within a section is designed to allow newcomers to be productive immediately.

- Functions and Formula
- Formatting the worksheet
- Copying ranges
- Editing, displaying and managing worksheet files
- Practical examples
- Creating graphs and printing graphs
- Database management and sorting
- Tables and statistics
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- Custom menus

Size 190 x 248 Cat. BS-0739

\$30.95



Z-80 Microcomputer Handbook

Designed to acquaint you with the hardware of the Z-80 and to discuss the impressive software aspects of this computer on a chip.

A number of chapters are devoted to the use of machine and assembly language.

Also included is a discussion of many different microcomputers built around the Z-80, including the popular TRS-80.

304 pages, 140 x 216, softbound
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IBM PC & PC/XT Users Reference Manual

Second edition.

Expanded to include the features of the more powerful PC/XT, this revised edition contains the most up-to-date information available on the IBM PC. From system setup through using DOS and programming techniques, this book provides users with clear, step-by-step explanations of IBM PC hardware and software - complete with numerous illustrations and examples. It covers the IBM PC and PC/XT collectively and also highlights the differences between these systems.

Includes: comparisons between the PC and XT • using DOS 3.1 • upgrading your PC to an XT • information on customised hardware configurations of the PC and XT • explains on how to load programs on a fixed disk and how to organise directories.

479 pages, 235 x 180mm

Softcover

Cat. BH-0902

\$45



Active Filter Design

This prehensive text provides both students and engineers with a clear understanding of the hows and whys of active filter design. Commonly used filtering terms are given, and a broad array of filter circuits are examined. Aids for determining which filtering circuit to use in a given application are supplied. The discussion then progresses through the final theoretical chapters which deal with mathematical approximations in a clear, concise manner. Also included are illustrations and descriptions of basic filters, the advantages and disadvantages of filter types, general transfer functions, and normalisation and scaling.

133 pages - 225 x 150mm

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Cat. BH-0900

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Make Money from Home Recording

By Clive Brooks

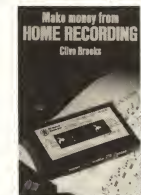
Now that you have spent all that money on home recording (6 MID) gear, how about getting something back! This book covers all the things you need to know to market your recording capability as well as covering the technical aspects of recording. Clive Brooks is a sound engineer who has taught sound recording. All ideas in the book have been personally proven by him.

105 pages, 140 x 215mm

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Synthesizers for Musicians

By R A Penfold

An introductory book for those who want to learn more about this fascinating subject.

All current forms of synthesis is explained including linear arithmetic as used by Roland, phase distortion (Casio), Yamaha's frequency modulation and sampling, etc.

This book is technical but is written with muso's in mind. Excellent glossary of terms.

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Cat. BP-1206

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This book gives full specifications on all TTL devices (whether LS, S or ordinary 74 series) from 7400-900 part numbers.

Over 820 pages, 170 x 230mm

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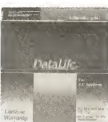


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Computer Leads

25 D male to Centronics
Cat. PL-0854 **\$18.95**

25 D male to 25 D female
Cat. PL-0855 **\$19.95**

25 D male to 25 D male
Cat. PL-0856 **\$19.95**
All leads 1.8 metres long.



D25 Plug/D9 Socket Adaptor

Ideal to convert IBM AT computer to 25 D serial port.
Cat. PA-0887 **\$10.95**



RS232 Surge Protector

The RS232 surge protector is used to protect RS232 ports from the possibility of costly damage from large voltage peaks caused by lightning or other power problems. This unit uses Metal Oxide Varistors (MOV) to protect pins 2, 3 & 7. It has one male and one female connector with all 25 pins connected straight through and with MOVs connected between pins 1 & 2, pins 1 & 7. The MOVs will suppress any voltage above 26 volts without affecting the normal RS232 voltage levels. The MOVs are capable of handling one joule of energy and 250 amps peak current.

Cat. PA-0885 **\$19.95**

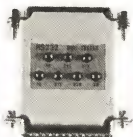


RS232 Mini Tester

This tester indicates the presence of all important interface line by LED illumination when signal is active. All 25 pins are connected straight through.

Cat. PA-0886

\$19.95



RS232 Mini Patch Box

The RS232 mini patch box is used to make custom RS232 interfaces. It consists of a small board with a connector on each end. All 25 pins of each connector go to the 25 solder pads. By custom wiring these pads many different inter-faces can be built: null modems, pin reversers, etc. Also a cable can be connected to tap signals from the RS232 line.

Cat. PA-0880

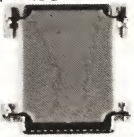
\$9.95



Female/Female Gender Bender

Saves modifying or replacing non mating RS232 cables by changing from male to female. All pins wired straight through.

Cat. PA-0884 **\$12.95**



Null Modem

The RS232 null modem is used to replace a set 25 pin RS232 connectors with transit DATA and receive DATA across CONNECTED.

Cat. PA-0883

\$9.95



Fix That Clock with our Clock Movements

If you're tired of looking at that mantle clock reading ten past one (and it's not), why not fix it! It will take you about 10 minutes with one of our clock modules.

We have four types. Just remove the old mechanism, throw it in the bin and replace it with an accurate quartz crystal movement. We even have ones that play the old fashioned tune (Westminster Chime) and then chime the hour. Also ideal for making your own custom clock face.

Standard Movement

- Very compact 56 x 56 x 15mm
- Self starting one second stepping motor
- Powered by 1 x AA battery that lasts about 1 year
- ± 15 second/month accuracy
- Supplied with three sets of hands
- Includes sweep second hand

Cat. XC-0100

\$12.95



Pendulum Movement/Quartz Clock

Ideal clock mechanism replacement for a small pendulum clock or create your own pendulum.

- 3 sets of hands supplied
- Uses 1 x AA battery

Cat. XC-0103

\$16.95



Melody Clock Movements

Two different modules are available. Both chime the hour after playing their tune.

XC-0106 plays Westminster Chimes each hour then gongs the hour (i.e. 7pm - 7 gongs)

XC-0107 plays a melody each hour, then gongs the hour.

Both units are supplied with:

- Clock movement
- Speaker and battery holder (3 x AA batteries required)
- 3 sets of hands

Cat. XC-0106 Westminster Chimes

Cat. XC-0107 12 melodies

\$19.95 each



12V Car Analogue Clock Movement

Convert the broken/unreliable or inaccurate mechanical clock in your car to space age precision. Made in West Germany by VDO, the module measures roughly 45 x 38 x 40mm deep. The compact size virtually ensures that it will fit in any space. Quantity strictly limited.

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8" (200mm) Plasma Lamp

The most beautiful thing we have ever seen.

Just imagine, a beautiful plasma display in your own home for under \$200! Watch as the red glowing element in the centre of the 200mm glass sphere projects beautiful blue lightning outwards to the inner surface of the ball where it magically changes back to crimson. This event occurs simultaneously at least 50-100 times all over the inside of the sphere and is constantly in motion. It is truly beautiful to watch. The intensity of the display can be controlled by a slider pot mounted on the attractive base. In addition you can trigger the performance by means of a sensitive sound activated unit.

The entire unit comes with its own dedicated power supply and is packaged in an attractive gift carton. This beautiful instrument will give countless hours of pleasure and relaxation and is truly unique.

Cat. XP-1000

\$199



Personal Databank/Calculator

This personal databank will store your telephone numbers as well as being a pocket calculator. The databank has 2k memory which is 1,936 characters which will accommodate more than 100 names and telephone numbers.

It measures only 88 x 57 x 4mm thick, about the same size as a credit card. It also has a special security code, so those private phone numbers can't be retrieved by anyone but you.

Other features include:

- Auto power off
- Edit feature
- 10 digit calculator
- Includes battery

We have seen these for as much as \$79.95, but with our direct importing we can offer them at about 1/2 that price.

Cat. QM-7200

\$39.95



Digital Thermometer

Forget those old mercury thermometers. This new digital model will measure body temperature from 32 - 43°C. Easy to use, simply hit the button to switch on, put in mouth or under armpit and when body temperature is reached it simply gives a 'beep' to tell you.

We have seen these in other catalogues for as much as \$29.95. Jaycars direct importing saves you money.

Cat. QM-6300

\$14.95



Plug-in Time Switches

Ideal for Security Lighting, Cooking Appliances, Electric Water Heaters, Electric Radiators, Swimming Pools, Spa Heating Pumps, Garden Lighting, Air Conditioners, Display Lighting, Electric Blankets, Radios, TV's, etc.

24 Hour

This compact 240 volt plug-in timer switch is easy to set and operate and will repeat the selected programme every 24 hours. Up to 24 (supplied with 8 pins) programmes can be set to come 'ON' and go 'OFF' in any 24 hour period at 30 minute intervals.

An override switch allows the flexibility of manually controlling the time switch without disturbing the placement of the pins. Easy to set and operate, dust cover supplied, compact design. 12 month guarantee.

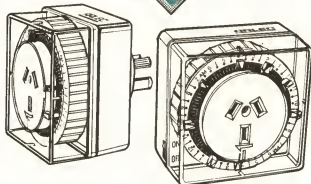
Cat. XW-0400
\$23.95

7 Day

Up to 42 (16 pins supplied) programmes can be set to come 'ON' and go 'OFF' in any 7 day period at 2 hour intervals.

Otherwise works and looks the same as the 24 hour model.

Cat. XW-0405
\$24.95



Motor/Gearbox Kit

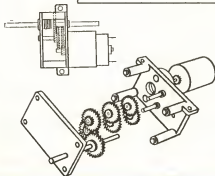
The kit shown below contains a motor with press-fit brass cog, gearbox housing, 3mm x 110mm steel driveshaft, 2 intermediate shafts, 7 gearwheels and 6 nylon bushes.

The motor will run from a source of 1.5 - 4.5 volts DC and depending on load consume between 200 - 800mA. A typical gearbox arrangement is shown in the exploded drawing.

YG-2712 with 25mm motor with high torque and oilite bearings. All components (apart from the motor) are UK or French made.

Cat. YG-2712
\$18.95

REDUCTION TABLE YG-2712				
No of gears	1.5V rpm	3V rpm	4.5V rpm	
6	2	4	6	
5	5	10	14	
4	16	32	45	
3	44	88	125	
2	150	300	410	
1	400	800	1150	



FM Wireless Intercom

These are great for homes, between garage/workshop/office and house, between rooms, grandparents upstairs, next door neighbours etc. The built-in monitor control allows you to put one in the children's room which transmits continuously, telling you when the babies are crying. Great for the office, between upstairs/downstairs, between offices - the possibilities are endless. To connect the intercoms, just plug into 240V power points and they transmit through the cable already laid. The only restriction is that both intercoms must be plugged into the same phase. (A phase usually incorporates 4 - 8 houses).

Cat. AI-5500

\$89.50 per pair



2 Station Wire Intercom

These intercoms are battery operated or can be used with our 240V adaptor (Cat. MP-3006 @ \$15.95). Wire is supplied to connect all units. Built-in call tone, so any station can contact master, even when master is switched off.

Cat. AI-5502

\$37.50
per pair



Smokeless Ashtray

In this day and age, cigarette smoking is becoming socially unacceptable. This product will help the poor old smoker by removing all smoke from a cigarette sitting in the ashtray.

It works like this:

Switch the unit on, and it will just sit there in the off mode. When you 'light up' simply tap the ashtray and it turns on and runs for 10 minutes before going back to the standby mode. The unit has a silent motor which draws the smoke inside and through the activated charcoal layers to purify the air.

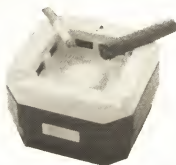
Operates on 2-C size batteries or a 3V DC power source.

The ashtray section (where the cigarette sits) is made from Melamine and just lifts out to empty and clean.

Size: 125 x 125 x 75mm

Cat. YX-2930

\$14.95



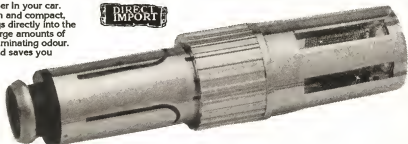
Car Negative Ion Generator

Now you can have all the benefits of your home ioniser in your car. This great new Jaycar direct import is durable, stylish and compact, measuring only 110mm in total length. It simply plugs directly into the cigarette lighter socket in your car. It can generate large amounts of negative ions for purifying air, and some ozone for eliminating odour. Jaycar's direct importing cuts out the middle man and saves you money. Cat. YX-2910

\$34.95



DIRECT IMPORT



Ultrasonic Air Humidifier

CREATE YOUR OWN CLIMATE IN YOUR OFFICE OR HOME

Airconditioners are great. They keep us cool on hot days. But in a big office building sometimes you have no control over them in your immediate work area. They de-humidify the air and dry your skin out. You get a dry raspy throat and sore eyes.

In a natural environment the air is much more moist!

The Jaycar ultrasonic humidifier corrects the balance in your work environment!

This unit re-humidifies air automatically by an ultrasonic mist evaporator. You can adjust the humidity in your environment in the range 30 - 90% R.H. It simply plugs into the power point and draws little power. It has a large water container (6.75 litres) and switches off automatically when dry. The mist output is free of dust as the air drawn into the unit is filtered. Great for gardeners who need to keep the humidity up in greenhouses for their palms, ferns and plants in general. Also ideal for offices and antiques.

Features

- Cutout switch when water runs out
- Generous 6.75 litre water tank
- Ultra quiet operation
- Adjustable intensity control
- Adjustable humidity control
- Air filter included
- Humidifies up to 4,000 cubic feet

Specifications

- 40 watts
 - 240V AC power source
 - Humidity control 30 - 90%
 - Dimensions 375(L) x 150(W) x 290(H)mm
- Cat. YH-5500

**WAS SELLING FOR \$149 in 1986
NOW ONLY \$99.50**

DIRECT IMPORT



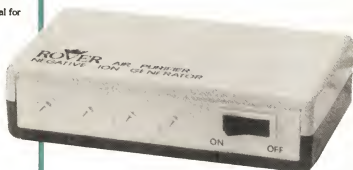
Rover Negative Ion Generator

Yes, we've made another scoop purchase. The importer contacted us with his dilemma and we purchased a quantity of these fully imported fully guaranteed air purifiers. These units are 240 volt operated, draw about 1/2 watt, deliver about 250 billion ions per second, and cover about 25 square metres.

It's even supplied with a tester PC board and spare needles. If you've ever wondered about negative ion generators, this MUST be the time to buy one. These were selling for about \$80. Jaycar has a limited quantity available.

Cat. YX-2905

\$29.95 SAVE \$50



Walkie Talkies

WITH MORSE CODE TRAINING AND AM RADIO

Keep the kids busy for hours! Each unit (2 are supplied) has a built-in AM radio as well as a morse code trainer, and the walkie talkie function. Seven transistor circuit gives clear, loud audio. Each unit requires 1 x 9V 216 type battery.

Cat. DW-3040

\$29.95 pair



Jaycar JVE-1 Video Detail Enhancer

What is a Video Enhancer?

It is a black box that connects between two VCR's to improve the quality of a recording of an original tape. No tricks, just sound engineering practice. They have been around TV studios for years and are now being built into the latest VCR's. The Jaycar unit was designed by a staff member of a well known Australian University and we have bitten the bullet by making them in Australia.

The unit works well (some say better) than units costing up to two hundred dollars or more. It is the only \$25 line 50 frame PAL-D Australian designed and made unit available that we know of. The unit features enhance, core/gamma control and bypass switch. It will drive up to 3 VCR's at once with no degradation and works well as a Video Distribution Amplifier as well. It is supplied with excellent documentation, is not a kit and is guaranteed for 3 months.

SPECIFICATIONS

- Maximum enhancement not less than +8.3dB @ 2MHz
- Enhance disabled (bypass) response, DC to 5MHz, -0.5 +1dB
- Colour subcarrier 0dB notch frequency, tuneable to 4.43MHz, ± 0.5 dB, all settings
- Amplifier group delay, less than 0.075 μ s
- Signal handling capacity not less than 1.35 volts P-P (sync. is clipped first)
- Power 12V AC @ 100mA
- Controls: on/off, enhance, enhance/bypass switch, core/gamma control
- Input connector RCA socket
- Output connectors RCA x 3

DESIGN FEATURES

- A unity gain notch at the colour subcarrier frequency, whose purpose is to prevent chrominance to luminance errors at high enhance levels.
- A closed loop configuration with lead lag compensation to achieve stable, well defined gain
- DC coupling eliminating large capacitors in series with the video signal and achieving DC response for applications requiring it
- Low output impedance prior to termination resistors, enabling up to 3 outputs to exist and be used or left unterminated
- A level dependent closed loop response or gamma control ('Core')
- Clip on negative going signals at -67 volts into 75 ohms to prevent sync. errors owing to overshoot

Cat. AV-6501

\$79.95

12 VOLT AC PLUG PACK POWER UNIT

Cat. MP-3020 **\$14.95**



Cyclic (Endless Loop) Tape Player

As featured in Silicon Chip March 1988

THIS IS NOT A KIT

Simply record a message onto the unit (microphone not supplied) and you can have a message from 15-30 seconds long repeated continuously or when necessary. Built-in amplifier - only needs a speaker.

Dimensions 70(W) x 56(D) x 45(H)mm

Weight 86 grams

Cat. YT-2720

\$29.95



Ultraviolet EPROM Eraser

This is the proverbial answer to a maidens prayer! It's all very good being able to program EPROMs easily but how do you ERASE them quickly and safely. You can put them out in the sun for an undetermined time or use a special high power UV tube in an unprotected 20W fluoro battery. You could also end up with a white walking stick! If you need to regularly erase the contents of EPROMs (even NEW EPROMs could be corrupted with random data) then this is your most cost-effective solution. It will erase up to 9 x 24 pin devices in complete safety to your eyes and your chips, in around 40 minutes for 9 chips (less for less chips). This US-designed product has a special safety conductive-foam chip drawer and has a double insulated design for your safety.

We are very excited about this product and we are sure you will be too.

FEATURES

- Erase up to 9 chips at a time
- Chip drawer has conductive foam pad
- Mains powered
- High UV intensity at chip surface ensures thorough erase
- Engineered to prevent UV exposure
- Long UV tube life

SPECIFICATIONS

Operating Voltage	240V 50Hz
Power Consumption	8 watts
Capacity	9 to 24 pins
UV Source Wavelength	253.7nm
UV Intensity	6.4mW/cm ²
Tube Life	3000 hours
Dimension	21.7 x 8 x 6.8cm
Weight	670 grams

Cat. XE-4950

Replacement tube

Cat. XE-4951 \$19.95

\$99.50



UHF TV Tuner

Sanyo Model T1087RA

Yet another fabulous scoop purchase

A compact high quality tuner that operates from 526 - 814MHz (corresponding to channels 28 thru 63). This tuner is designed for Australian standard reception (AS 1053 1973), and is offered at a very low price.

You can grab one now for the silly price of \$14.95! This price includes circuit diagrams and connection drawing. You can have a photocopy of the complete manual for \$4 but a lot of the info is in Japanese!

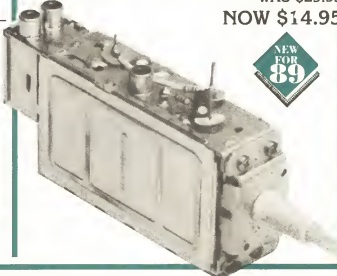
This is a very cheap way to convert a VHF only TV to UHF! (Some skill may be required).

SPECIFICATIONS

Power	+12V DC nominal @ 14mA. Case neg.
Bandwidth	526 - 814MHz (28 - 63 ch.)
AFT	+6.5V
Dimensions	150 x 65 x 28mm
Tuning multirotation	of 1/4° shaft. Knob not supplied.
Cat. DM-1000	

WAS \$29.95

NOW \$14.95



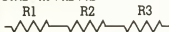
Resistors



COLOUR	TENS	UNITS	MULTIPLIER	TOLERANCE
Black	0	0	1	20% (M)
Brown	1	1	10	1% (F)
Red	2	2	100	2% (G)
Orange	3	3	1000	-
Yellow	4	4	10000	-
Green	5	5	100000	-
Blue	6	6	1000000	-
Violet	7	7	-	-
Grey	8	8	-	-
White	9	9	-	-
Gold	-	-	0.1	5% (I)
Silver	-	-	0.01	10% (K)

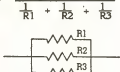
Resistors in Series

$$R \text{ TOTAL} = R1 + R2 + R3$$



Resistors in Parallel

$$R \text{ TOTAL} = \frac{1}{\frac{1}{R1} + \frac{1}{R2} + \frac{1}{R3}}$$



Ohm's Law

The relationship between resistance, voltage and current is defined by Ohm's Law. The formulae are:

$$E = I \times R$$

$$I = E/R$$

$$R = E/I$$

where

E = Volts

R = Resistance

I = Current

An easier way to remember Ohm's Law is by this diagram. Just cover up the value you are looking for, and the formula shows.

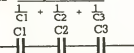


Capacitor Magnitudes

1,000,000pF	1μF or 1000nF
100,000pF	0.1μF or 100nF
10,000pF	0.01μF or 10nF
1,000pF	0.001μF or 1nF
100pF	as is (100pF)
10pF	as is (10pF)
1pF	as is (1pF)

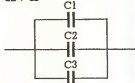
Capacitors in Series

$$C \text{ TOTAL} = \frac{1}{\frac{1}{C1} + \frac{1}{C2} + \frac{1}{C3}}$$



Capacitors in Parallel

$$C \text{ TOTAL} = C1 + C2 + C3$$



Basic Logic Functions



AND



OR



NAND



NOR



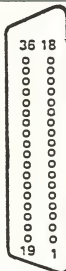
NOT



EXCLUSIVE-OR

Standard Centronics Printer Plug Connections

Pin No	Signal
19	Signal Ground
2	Data bit 0
3	Data bit 1
4	Data bit 2
5	Data bit 3
6	Data bit 4
7	Data bit 5
8	Data bit 6
10	Data acknowledge
11	Input busy ready



LEDs

Light emitting diodes are a special type of diode which lights up when a voltage is applied. They are available in red, green, yellow, orange and in various sizes and shapes. LEDs are polarised, and can be damaged by reverse connections. As a general rule, the longest lead is the positive (anode).

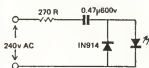


A - Anode
K - Cathode

COLOUR	RED	ORANGE	YELLOW	GREEN
VF (Typical)	1.8V	2.0V	2.1V	2.2V

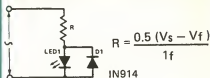
Table 1: Typical forward voltage characteristics of standard LEDs with forward current set at 20mA

OPERATING DIRECTLY FROM 240V AC MAINS

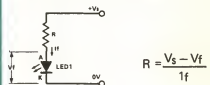


The above circuit results in a LED current of approximately 16mA.

OPERATING LED FROM AC VOLTS AS AN INDICATOR



OPERATING LED FROM DC VOLTS

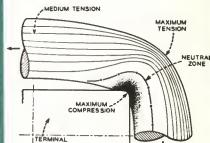


The two formulae shown should be used in conjunction with Table 1 to determine the required series resistor to operate LEDs at 20mA.

The Technology of Wire-Wrapping

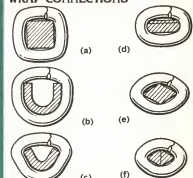
A wire wrap connection is made by coiling the wire around the sharp corners of a terminal under mechanical tension. This method of connection was developed by Bell Telephone Laboratories, Western Electric Company.

METAL-TO-METAL CONTACT



Bending the wire around the sharp corner of the terminal the oxide layer on both wire and terminal is crushed or sheared, and a clean, oxide-free metal-to-metal contact is obtained.

TERMINALS SUITABLE FOR WIRE-WRAP CONNECTIONS



(a) Square Terminal
(b) J Terminal
(c) V Terminal
(d) Coined and flattened wire terminal
(e) Coined wire terminal
(f) Twin wire terminal

A terminal must have at least two sharp edges.



TRIPLE CONNECTION

STRENGTH OF CONNECTION

The strength of a WIRE-WRAP connection is considerably in excess of that of a soldered one. It is less easily stripped from the terminal and is less subject to breakage.

GAS TIGHT CONTACT AREAS

The contact areas of a WIRE-WRAP connection remains gas tight when exposed to temperature changes, corrosive atmospheres, humidity and vibration.

If two additional resistors are added to a circuit (as shown below), regulators like the 7805 and 7905 can be made to give a higher output voltage.

$$R1 = VR/0.02$$

$$R2 = VB/0.025$$

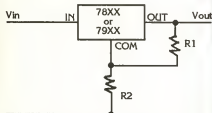
VR = normal regulated output from IC
VB = amount by which regulator is boosted above VR

For example:

Vout	Regulator	R1	R2
6	5V	220	39
9	5V	220	150
13.8	12V	560	68
18	15V	680	120

To make a variable regulator use a pot as R2

VOLTAGE BOOSTING

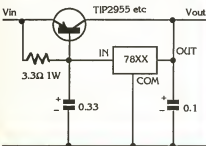


Increasing the Output Current of the Regulator

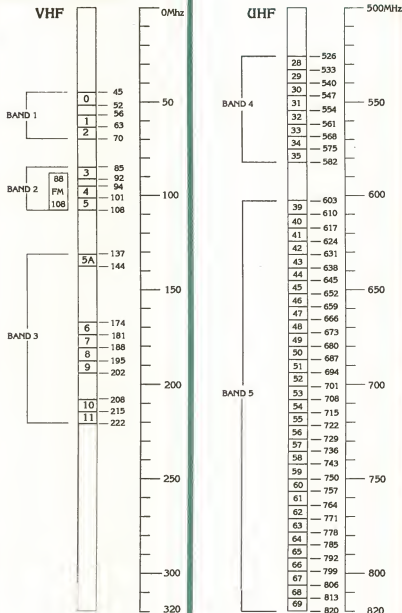
By adding a PNP power transistor to a positive regulator the output current increases above the normal rating of the regulator.

To deliver in excess of 4 amps see the circuit below. The pass transistor must be mounted on a heatsink. With a negative regulator the same conditions can exist but the polarity of the pass transistor would be NPN, such as a 2N3055, etc.

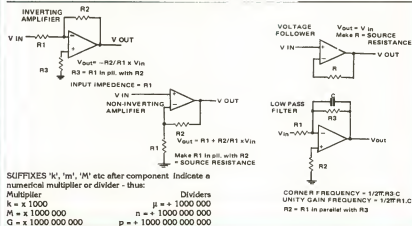
CURRENT BOOSTING



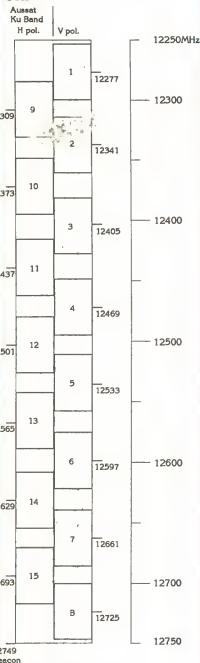
Australian TV Channel Chart



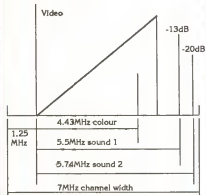
Standard Op-Amp Configurations



SHF



VHF/UHF Television Channel PAL B



Polyswitch Solid State Circuit Protectors

The Polyswitch device is a revolutionary new form of solid state circuit protection. Polyswitch is made of a conductive filled polymer material. The ones that Jaycar stock look like large ceramic disc capacitors. At low temperatures and currents the device adds negligible resistance to a circuit (typically 0.03 to 0.2 ohms). The device has virtually no inductance or capacitance. When an excessive amount of current flows through the device it rapidly heats up internally, this causes the internal resistance of the device to increase quickly and dramatically. The increase is so rapid, in fact it can be likened to the action of a switch.

This phenomenon of course is very handy! You can use a Polyswitch as a circuit protector for electric motors, excessive battery discharge, in fact in most applications where an automatically-resettable fuse would be desirable. In this discussion the application will relate to loudspeaker protection using Polyswitches.

The Problem

Loudspeakers are generally designed and sold separately from amplifiers. Thus mismatches can occur and lead to damage. Also, the advent of digital recording places extra burdens on systems. Speaker damage can result from a number of factors, including:

- High-power amps may simply overdrive the speaker coils with excessive power on sustained program material.
- Digital recordings, with their ability to reproduce high-frequency material, place extra strain on the tweeters.
- Low-power amps may be operated in clipping, which causes an upward frequency shift of power into the tweeter, which overloads. This problem is especially common with the wide, dynamic range of digital program material.
- Unstable amplifier systems may oscillate in the ultrasonic range, overloading the tweeter.

Polyswitch solutions

With a Polyswitch device in series with the speaker (either before or after the crossover), a sustained overload causes the device to switch to a high-resistance state, protecting the speaker. A reduction in drive power, caused by a change in the music or by the user turning down the power, allows the device to automatically reset.

Polyswitch device alone

A properly sized Polyswitch device can be put in series with the speaker to be protected as shown in Figure 1A.

A sustained overdrive condition causes the Polyswitch device to switch to high resistance. The speed of tripping depends on the amount of overcurrent. The resistance level in the tripped state (R_{PS}) depends on the power dissipation of the device (P_D) (essentially a constant) and the square of the drive voltage (V), specifically:

$$R_{PS} \cong \frac{V^2}{P_D}$$

Therefore, once a device trips, an increase in drive voltage increases the resistance of the device, and a decrease lowers resistance. The resistance when switched will typically be three to four decades higher than base resistance, causing an abrupt reduction in power to the speaker when the device trips.

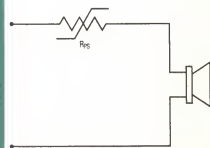
The effect on load power is illustrated in Figure 1B. Initially, load power increases with drive voltage. When the drive voltage causes an excess current to trip the Polyswitch device,

load power typically is reduced 20 to 30 decibels. Further increases in drive power reduce the load power even more. A reduction of drive voltage increases load power. Since it is now the dominant load, the device does not trace back the original curve. Rather, the drive voltage must be significantly reduced until the device can no longer draw power (typically two to three watts) sufficient enough to maintain itself in the tripped state. The approximate condition for the device to untrip is:

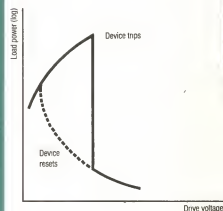
$$\frac{V^2}{4R_L} \leq P_D$$

R_L is load resistance. The untripping is visible on the decreasing drive-voltage portion of Figure 1B.

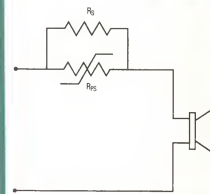
Once the device has reset, normal operation can be restored.



Typical Circuit



Effect on Load Power



With Shunt Resistor

Transistors

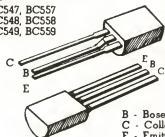
Transistors are used to amplify and switch signals. They have three terminals:

- Base (b)
- Collector (c)
- Emitter (e)

A transistor has only 'one way round'. If you solder it the wrong way round, there is a good chance that it will be destroyed the moment power is applied to it. Care is necessary when soldering transistors in circuit. Take extra care to identify the terminals. Quite similar looking transistors commonly have completely different lead connections. Make sure you follow the component overlay and mount them correctly on the PC board.

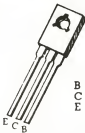
TO92 package Small Signal transistors

BC547, BC557
BC548, BC558
BC549, BC559



- B - Base
- C - Collector
- E - Emitter

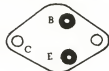
BD139
BD140
MJE340
MJE350



- B - Base
- C - Collector
- E - Emitter

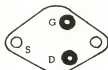
TO18 Package Power Transistors

BUX80
2N3055
MJ15003
MJ15004



Viewed from below

TO3 Package Power Mosfets



2S149
2SK134

- G - Gate
- S - Source
- D - Drain



Small Signal FETs



- G - Gate
- S - Source
- D - Drain

2N5457
2N5458
2N5459
2N5484
2N5485
MPP106

Quartz Crystals - Theory

There are three general modes of vibration for which quartz crystal units are commercially designed: extensional, shear and flexure.

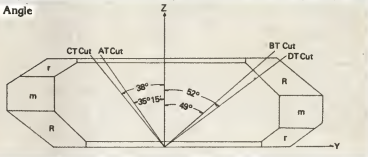
Overtone modes of the thickness shear are available at the seventh and ninth to 200MHz and beyond when suitable oscillators are used.

The performance characteristics of a crystal plate are dependent upon both the particular cut and the mode of vibration.

The most common crystals used are AT cut, since this cut delivers the best temperature coefficient and provides the widest range of frequencies. The AT cut is appropriate for frequencies from approximately 800kHz to as high as 30MHz in the fundamental mode and up to 200MHz with overtone operation.

The other cuts listed function mainly at frequencies below 1.0MHz.

Cutting Angle



It's excellent stability makes the crystal desirable for applications in severe environments such as aircraft radio equipment, where sharp changes in temperature are common.

The unique advantage of the AT-cut is that it follows a 'style' frequency curve over a wide temperature range.

A slight alteration to the angle of cut results in a significant change to the slope of the frequency curve making it possible to hold a very stable frequency over a specific temperature range.

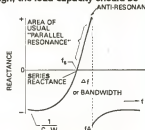
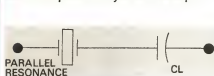
Series Resonance

When the crystal is operating at series resonance, it looks resistive in the circuit in a well designed series resonant circuit, correlation is not a problem.



Parallel Resonance

When the crystal is operating at parallel resonance, it will look inductive in the circuit. Therefore, change in circuit reactance values will have the effect of pulling the frequency of the crystal. If the crystal is to be used at parallel resonance, the load capacity that the crystal is looking into should always be specified. This load capacity is the dynamic capacity of the total circuit measured or computed across the crystal terminals. In parallel circuit design, the load capacity should be selected to operate the crystal at a stable point.



Frequency Tolerance

Frequency tolerance is the amount of frequency deviation (plus or minus) from the desired operating frequency at a specific temperature. Accuracy requirements for crystal tolerance are expressed in percentages ($\pm 0.005\%$, $\pm 0.003\%$, $\pm 0.002\%$, $\pm 0.001\%$).

Temperature Coefficient

The frequency stability of a quartz blank with respect to changes in temperature is a function of quartz, the mode of vibration and the type of cut.

Equivalent Circuit

The equivalent circuit of a crystal, as illustrated, is useful to explain the basic concepts governing the crystal's performance. C_0 represents the static capacitance and is the sum of the capacitance between the electrodes and capacitances added by the wire leads and holder. The $R1, L1, C1$ branch is known as the motional arm. C is a function of the mass and R is the sum of the bulk crystal losses.

Shunt Capacitance

The total static shunt capacitance is the sum of the static capacitance of the crystals, C_0 , and the total distributed capacitance of the crystal leads and terminals.

Quality Factor (Q)

The circuit Q or quality factor of a crystal is defined by the ratio between the resonant frequency and the bandwidth. The Q factor is a performance parameter that controls the maximum stability obtainable in a given crystal.

PRICES

Many catalogues that you get these days do not have prices printed in them. This means that you have to check the price first if you want to order. People who print catalogues without prices have the benefit of being able to change their prices very easily. You wouldn't know!

Jaycar's catalogue has a price, including sales tax, ON EVERY ITEM. Once the ink on the page is dry that's the way the printed information stays. We put the price there so that you know immediately what you are up for. You can compare our prices with the competition or make comparative decisions about various models, etc. All of this adds up to convenience of course! That's what we are here for.

When we print the catalogue we basically 'freeze' our prices for as long as possible. On average over 80% of the product prices do not change over the useful life of the catalogue (10 months out of 12). On very many occasions the price goes DOWN not up.

Unfortunately, however, you may experience a price rise. This is ALMOST ALWAYS beyond our control. A supplier simply puts his price up! If we cannot find a viable alternative we have no choice. You then have the option whether to buy or not, or seek a refund. The choice is yours.

To summarise then: our prices are correct (we triple check) at the time of printing but if in doubt PLEASE check with us first.

If you are dissatisfied with the new price, please return the goods IN ORIGINAL CONDITION for a full refund or credit (please specify) less P & P.

For more information see "Satisfaction Guarantee"

AVAILABILITY

We make every effort to ensure that goods in this catalogue are available by its distribution date - March 1989. It is always wise, however, to check by phone with your nearest Jaycar store or our Mail Order Centre first to determine availability, phone (02) 747 1888. We appreciate that this may be inconvenient but it is still better to do this than travel a long distance to our stores only to be disappointed when you get there.

To be fair over 90% of our products ARE in stock at any one time, but it's the old story.

CATALOGUE NUMBERS - ORDER FORMS

Our catalogue numbering system is designed to minimise the chances of errors or ambiguous descriptions. Please help us to help you by using them.

Likewise, our order form is designed to help you get your order faster. A copy of our form is printed in this catalogue. If you do not wish to use the form in this catalogue that's O.K. If possible, photocopy the form or use a blank sheet of paper. If you use a blank sheet, make sure that all details required by the form are duplicated on your sheet.

A spare mail order form will be sent to you when you receive your mail order. Mail order forms are available, post free at no charge, on request.

P.S. Minimum mail order is \$10.00, unless otherwise advised.

GOODS MISSING IN TRANSIT

By far the most common method for mail orders is by post. It is ideal for small orders (say below \$50) and for small packages. We have despatched over 100,000 postal items in the last 8 years and the number of items genuinely lost would represent far less than 0.001% of this total.

So, despite what the media says Australia Post is NORMALLY very reliable! The only time it is not reliable is when there are industrial disputes, less these days. It also gets a little slow at Christmas time but, all in all it hardly ever genuinely loses anything.

By and large other transport, i.e. road/air are very reliable as well it must be emphasised, however, that our RESPONSIBILITY FOR THE GOODS CEASES when the goods are handed to your specified carrier. We do not own the means of transport that gets the goods to you and have no control over them, and, as is normal commercial practice cannot be held responsible for them. We emphasise that loss of goods in transit is EXTREMELY RARE, however, ownership of the goods passes to you once we have passed the goods to the carrier.

If you do not wish to take this (admittedly small) risk, please specify insurance when you order. Insurance will cost you 1% of the order value and we are happy to arrange it on your behalf. This insurance also covers goods DAMAGED in transit. If you order by phone you will be asked if you wish us to insure on your behalf. Insurance will cost \$1.00 for every \$100.00 value or PART THEREOF. In other words if your order is for \$145.00 the insurance will be \$2.00.

If you do not wish to insure a statement saying "Insurance Declined" will appear on the order. If you post an order to us don't forget to consider insurance. We do not automatically insure unless you specify it. If you don't mention insurance you are NOT insured.

DAMAGED GOODS

The same basic principles apply to goods damaged in transit as goods missing.

If you suspect that the parcel has suffered to the point where the goods inside are damaged do not open the parcel. Contact the carrier or local Post Office and deal directly with them. If the goods have been insured contact us.

PAYMENTS

It is very easy to arrange payment for goods at Jaycar.

1. Jaycar accepts BANKCARD (Australia and N.Z.)
 2. VISA CARD (International)
 3. MASTERCARD (International)
 4. AMERICAN EXPRESS (International)
- Minimum order for the above cards is \$10.00. We do not accept other cards.

SEE "ORDER BY PHONE"

5. CHEQUES. You may not be sure of the total amount in your mail order. Many customers find that it is convenient to leave the amount payable blank. When we calculate the correct amount, we will fill the correct amount in and advise you with a receipt. Don't be horrified, it's quite safe. Simply make out the cheque to Jaycar Pty Ltd and CROSS IT with the words "NON NEGOTIABLE". If you are still worried you can write on the top of the cheque "CHEQUE NOT TO EXCEED XXXX DOLLARS", allowing a margin over what you think the final sum will be.

This sensible system saves us from issuing small credit notes or charging you for small amounts.

We have not had a complaint from any of the many customers who have used this system over the years. All cheques must be made payable to Jaycar Pty. Ltd.

6. OTHER PAYMENTS. We accept Postal Notes (preferably in Australian currency), please do not send "CASH" i.e. money through the post.

Finally, we do not supply C.O.D. Jaycar works on low direct-to-the-public prices and the high C.O.D. commission charges prohibit this type of sale.

ORDERING BY TELEPHONE

Jaycar has never made it easier to order by Telephone! We have installed a toll-free telephone order number. What does this mean? Well, if you live outside the Sydney Metropolitan area you would normally have to phone us by STD. We don't believe that STD telephone charges are all that expensive but even so they are a cost. If you wish to order on our 008 022 888 order line you only pay for the cost of a local telephone call. You can even call us and mail order from anywhere in Australia from a public phone booth! You simply dial the number and quote either your Bankcard, Visa, Mastercard or American Express card number and we will take care of the rest!

We expect the toll-free line to be very busy so please limit your calls on this line to ORDERS ONLY. If this telephone number is engaged or if you want to make a general call or order enquiry use our famous mail order hot line 02 747 1888. You should always be able to get through on this number.

ORDER BY FAX

Simply write your order out (either on a blank sheet of paper or one of our forms) and send it to us from your FAX machine. Our FAX number is (02) 744 0767 and is on line 24 hours a day 365 days of the year.

Note that you can Telex your order to us anytime as well on AA 72293.

MANUFACTURERS/AGENTS GUARANTEES

1. For goods supplied to us in Australia we will honour the local suppliers guarantee. This is generally 90 days.

2. For Jaycar direct import goods, we generally offer a 90 day guarantee as well. If you wish to check this, we are only too happy to provide further information.

3. Kit guarantee. If we were to add a guarantee to kits two things would occur.

(i) The price of the kit would increase significantly.

(ii) The average contractor would object as they would be heavily subsidising the total amount who should not be attempting ambitious projects in the first place. (Remember satisfaction guarantee).

Most kits are successfully constructed with few problems. Let's get it straight. Jaycar guarantees that all kits contain brand new

components of the best commercial quality. The individual parts are therefore guaranteed. Catch-22. Once the parts have been soldered, however, we have very little way of verifying whether the fault was caused by you or our supplier. The supplier will not then honour guarantees. So, if you suspect that a part is faulty, (perhaps it looks crushed) send it back to us. We will more than likely replace it immediately.

The question of kdt warranty is basically a matter of common sense. We guarantee the parts but we obviously CAN'T guarantee how well you put the kit together.

Firstly, Jaycar thoroughly reviews designs before deciding whether to produce a kit for a project. This screening process helps to provide further assurance that only reliable circuits are available.

4. SEMICONDUCTOR GUARANTEE. Jaycar only buys semiconductor products from the major reputable manufacturers among which are: Motorola, Texas Instruments, National Semiconductors, RCA, Raytheon, Philips/Sinetics, Siemens, Hitachi and Mitsubishi. Because they have a high reputation to maintain, they carry out 100% quality control on their products. Our chances of receiving faulty products are therefore very slim. Because Jaycar has no control over the end-user of the component the manufacturers generally will not entertain a warranty claim. But BECAUSE we only buy quality you're chances of experiencing a faulty component are virtually zero.

EXCLUSIVE FREE SEMICONDUCTOR INSURANCE 12 MONTHS WARRANTY ON SEMIS!

You may have a very good reason to believe that you have a faulty semiconductor which was purchased from us either as part of a kit or discrete form. After you have double (triple) checked that your circuit is O.K. contact us. We need to know the following:

- Date of purchase
- Place of purchase i.e. shop or mail order
- Your name and full address
- Full details of what testing procedures you have taken to establish where the fault lies
- What antistatic procedures you have taken for MOS/CMOS devices

If you are writing to us you may include the suspect device securely packed as well as proof of purchase. If you are ringing in, we may ask you to send the part later. In any case we must have proof of purchase from us when you claim.

If we feel that your claim is valid Jaycar agrees to provide an exact or reasonable equivalent replacement. This offer is valid for 12 months from receipt of the original goods.

All claims are subject to an insurance excess of 40% of the value of the goods, i.e. if the component is valued at \$1.00 the excess which you must pay is 40¢. Normal post and packing charges apply as well.

We believe that this policy is a breakthrough for the constructor. The policy is designed to help the home/hobby constructor and does not apply to volume purchases, OEM's, etc. OEM QUANTITY PRICE/SALES TO DEALERS Jaycar is a franchised distributor of several products notably among which is ITT Cannon connectors. We also are Australian agents for many products such as Lascar Digital Panel Meters, etc. We welcome OEM inquiries for purchase of components in quantity. Generous

discounts apply and normally good stocks are kept. Telephone 02 747 2022 and ask for BRUCE or GARY for details.

FREIGHT

Warranty repair or replacement for goods other than semiconductors is naturally done free of charge. The freight charges, however, are not. The customer is required to pay freight to and from our service department. This is standard commercial practice.

SALES TO SCHOOLS, GOVT. DEPTS., PUBLIC COMPANIES, etc.

Jaycar is quite happy to provide ACCOUNT FACILITIES for the following:

- All schools (Government and Non Government)
- All CAE's, Colleges, Universities, etc.
- All State & Commonwealth Govt. Depts. including research institutions
- All mining companies
- All TV and radio stations
- All public i.e. "LTD" NOT "Pty. Ltd." companies
- All Pty Ltd companies must apply for an account, please ask for an account application form.

If you are one of the above you can buy from us on a 30 day (strictly from invoice) account. The invoice will go with the goods or to your accounts payable office (nominate). You can make further savings if your organisation can buy sales tax free. In this case you must give us an official order stating sales tax exemption or tax number. You can telephone, telex or Fax your order to us as well.

NOTE: Because of the TREMENDOUS AMOUNT of paperwork we must complete for the Australian Taxation Office, (we have to PAY the tax first and then claim it back) we must insist on a minimum tax-free order value. This amount is a \$30.00 minimum order with a \$10.00 per line minimum.

NEW ZEALAND & OTHER OVERSEAS ORDERS

We are quite happy to take telephone or postal orders from New Zealand. As a matter-of-fact, direct shipments to New Zealand are Australian sales tax free and the savings can be considerable. Because the forwarding costs are different, please allow more for the postage and write for a quote for other forms of freight. As a guide, please add 50% to our normal post and packing charges for surface mail delivery.

Minimum tax free orders \$10.00 per line item plus minimum \$30 value.

PHONE ENQUIRIES DIAL (02) 747 1888 WRITTEN ENQUIRIES ON ORDERS

If you wish to inquire about the whereabouts of your mail order please give the following details:

- Your full name
- Your delivery address including postal code
- The mail order reference number, if you have it
- If the goods were paid for over the counter, the relevant cash sale docket number and the

date

• A brief description of the goods, with catalogue numbers if possible
The above applies whether writing or phoning in. If you phone in you will be asked to ring back in 15 - 20 minutes. This saves you the expense of waiting while we locate your order.

SATISFACTION GUARANTEE

We are very proud of the goods we sell and are very confident that you will be satisfied with your purchase.

If you have purchased goods that qualify for this guarantee* personally from one of our stores we offer:-

- To refund your money in full (under \$30 in cash, over \$30 by a company cheque, posted within a few days of goods returned, or full credit card credit on the spot) PROVIDED that you have returned the goods in original condition (and that means the outer packaging, if any, must be unmarked). You must have evidence of receipt of purchase i.e. sales docket and/or cash register receipt.

Please do not ask for a refund After 7 days from purchase date. If you have purchased goods by mail order, we offer the same guarantee but for 14 days from purchase date. (This allows for transport delays). In the case of mail orders we cannot refund post and packing or other transport/insurance charges.

- Goods not covered by policy • Many semiconductors • All books
- Please do not ask for a refund if you have no evidence of purchase from us; so keep your sales dockets.

CAREER OPPORTUNITIES WITH JAYCAR

We are not the biggest but we reckon we are the BEST. If you have an outgoing personality and have a keen interest in electronics with a sound knowledge, we would like to hear from you. We have an ongoing training program for "Retail Junior Store Manager".

If interested (no obligation) contact:
THE PERSONNEL OFFICER
JAYCAR ELECTRONICS Pty. Ltd.
P.O. BOX 185
CONCORD, 2137

MANUFACTURERS EXCESS STOCK

In order to remain competitive and keep abreast of current technology, manufacturers of electronic equipment must continually upgrade their designs.

This sometimes necessitates making redundant perfectly good components or equipment in previous designs.

If you, as a manufacturer are in this position, Jaycar may be able to help you. We purchase manufacturers stock, surplus to their requirements. This may include any type of new electronic (or electrical) components, including transformers, etc - even sub-assemblies and completed equipment. We pay cash for good quality prime spec parts!

CALL GARY JOHNSTON OR BRUCE
ROUTLEY NOW ON (02) 747 2022
OR FAX YOUR PARTS LIST
/COMPUTER PRINTOUTS TO US ON
(02) 744 0767

TO: JAYCAR Pty Ltd P.O. Box 185 Concord 2137

ORDER FORM

Date In	Date Out	If you have a query quote this number	Price	Assemblies
		No:		

Delivery Instructions

Heavy & Bulky Items cannot be sent by post

- ☐ MAIL (see table below)
- ☐ AIRMAIL (add \$4 to P&P value)
- ☐ ROAD FREIGHT
(\$13.50 anywhere in Australia up to 40kg)
- ☐ OVERNIGHT JET AIRFREIGHT
(\$8 anywhere in Australia up to 3kg)
- ☐ TRANSIT INSURANCE
(against loss or damage)
(\$1 per \$100 goods value)

Date _____ Phone _____

Current Address, Please Print

Name

Address

Postcode

Have you bought by Mail Order from us before? YES ☐ NO ☐
IF YOUR ADDRESS HAS CHANGED PLEASE GIVE US YOUR OLD ADDRESS DETAILS

Please describe fully, if there is not sufficient room attach a neat list of the items you require.

14 DAY SATISFACTION GUARANTEE

Minimum order amount **\$10**

OFFICE USE ONLY

Back Order Action

Cat. Nb.

Qty.

Description

\$ c

\$ 6

Suppliec

Remarks

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Method of Payment

Cheque ☐

Money Order ☐

Credit Note ☐ No:

Amount

Bankcard ☐ Visa ☐ Mastercard ☐

American Express ☐

No:

Expiry Date

Signature _____

SUBTOTAL

Post/Freight Charge

Reg/Insurance, etc.

SUBTOTAL

Less Credits

TOTAL

POST & PACKING CHARGES

\$ 10 - \$24.99	_____	\$3.75
\$ 25 - \$49.99	_____	\$4.50
\$ 50 - \$99.99	_____	\$6.50
\$100 - \$198	_____	\$8.00

IMPORTANT INFORMATION
OUT OF STOCK LINES: Items under \$10 are not back ordered. Please re-order in ONE month's time. A copy of this order is returned as your delivery advice. Note the column advising delay (in weeks) for items back ordered.

If your order is unusually bulky, heavy or fragile we may choose to send your goods to you by road at our expense. We cannot send goods by road to a P.O. Box however. If you feel your order may fit into this category, please include a delivery address - either work or home.

MAIL INFORMATION: Simply add the amount shown in the Post and Packing charges chart on the left. Don't forget to add extra amount for airmail or insured, if you require these services. These charges are for goods sent by POST in Australia only - NOT AIRMAIL, OVERSEAS OR ROAD FREIGHT.

FINAL CHECK: Please make sure that you have given full details of the products you require, the correct prices, the full postage or transport costs plus make sure that your NAME AND ADDRESS are legible. Your order will arrive faster if all details are correct.

If you are using credit cards be sure to include your full address.

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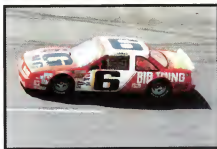
What We Did In '88

During the course of 1988 Jaycar sponsored a number of official Bicentennial and non Bicentennial events. Among the events sponsored were: "Boss" second place getter in the 1988 Bridge-to-Bridge Waterski Classic; Michael Norman/Cessna 172 in the Bicentennial Around Australia Air Race. (Bad luck Mike!); Mandy McPherson in the Melbourne to Canberra "Federation Ride"; and John/Ken Lawes in their Oldsmobile Delta-88 "Nascar Christmas 500" at Calder in December. Not to mention the '88 Bash!

We were proud to be associated with so many successful events during the course of the Bicentennial year.



Anxious moments at scrutineering.



With a full head of steam . . .



"Taco who?"

1988 Bourke to Blatherskite Bash

Once again our AP-5 Valiants made the trek from Bondi Beach to Bourke, Tibooburra, Marree, Oodnadatta, Eriundata, Ayers Rock and finally to Blatherskite (Alice Springs).

The cars performed flawlessly as usual. The only mechanical problem that we had was a cracked lid on the esky!

Despite our immaculate record, the officials were very harsh on us this year. Car 40 was placed officially last!

The photos show the cars having a 'pit stop' near the Olgas and on the way in to Oodnadatta at dusk.



"Boss" at the end of the race. (Driven by Pat Cole).



The Federation Ride
April 17th to May 9th 1988
Melbourne to Canberra.
343 horses and riders started.
Approximately 18 completed the ride as
the original horse-rider partnership.
Mandy McPherson and 'Stohl' were one
of the 18 finishers.



Mike Norman and his trusty Cessna 172.



Glacial Junction west of the Admiralty Mountains. Photograph by Jutta Malnic.



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